

Service
Service
Service



Service Manual

Horizontal Frequency
30-83 kHz

TABLE OF CONTENTS

Description	Page	Description	Page
Table of Contents.....	1	6.3.Key Board.....	32
Revision List.....	2	6.4.Light Sensor Board.....	33
Important Safety Notice.....	3	7.PCB Layout.....	34
1.Monitor Specification.....	4	7.1.Main Board.....	34
2.LCD Monitor Description.....	5	7.2.Power Board.....	35
3.Operation Instruction.....	6	7.3.Key Board.....	37
3.1.General Instructions.....	6	7.4. Light Sensor Board.....	37
3.2.Control Buttons and Connections.....	6	8.Maintainability.....	38
3.3.OSD Setting.....	8	8.1.Equipments and Tools Requirement.....	38
4.Input/Output Specification.....	20	8.2.Trouble Shooting.....	39
4.1.Input Signal Connector.....	20	9.FOS Testing.....	43
4.2.Preset Display Modes.....	21	10.Firmware and DDC Instruction.....	47
4.3.Panel Specification.....	22	11.White-Balance,Luminance Adjustment.....	65
5.Block Diagram.....	24	12. Mechanical Instructions.....	67
5.1.Main Board.....	24	13.Monitor Exploded View.....	72
5.2.Power Board.....	25	14.BOM List.....	73
6.Schematic.....	26		
6.1.Main Board.....	26		
6.2.Power Board.....	30		

SAFETY NOTICE

ANY PERSON ATTEMPTING TO SERVICE THIS CHASSIS MUST FAMILIARIZE HIMSELF WITH THE CHASSIS AND BE AWARE OF THE NECESSARY SAFETY PRECAUTIONS TO BE USED WHEN SERVICING ELECTRONIC EQUIPMENT CONTAINING HIGH VOLTAGES.

CAUTION: USE A SEPARATE ISOLATION TRANSFORMER FOR THIS UNIT WHEN SERVICING

Revision List

[illegible]

Important Safety Notice

Proper service and repair is important to the safe, reliable operation of all AOC Company Equipment. The service procedures recommended by AOC and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. AOC could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, AOC has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by AOC must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.

Hereafter throughout this manual, AOC Company will be referred to as AOC.

WARNING

Use of substitute replacement parts, which do not have the same, specified safety characteristics may create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from AOC. AOC assumes no liability, express or implied, arising out of any unauthorized modification of design. Servicer assumes all liability.

FOR PRODUCTS CONTAINING LASER:

DANGER-Invisible laser radiation when open AVOID DIRECT EXPOSURE TO BEAM.

CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.

Take care during handling the LCD module with backlight unit

- Must mount the module using mounting holes arranged in four corners.
- Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
- Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
- Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
- Make certain that treatment person's body is grounded through wristband.
- Do not leave the module in high temperature and in areas of high humidity for a long time.
- Avoid contact with water as it may a short circuit within the module.
- If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)

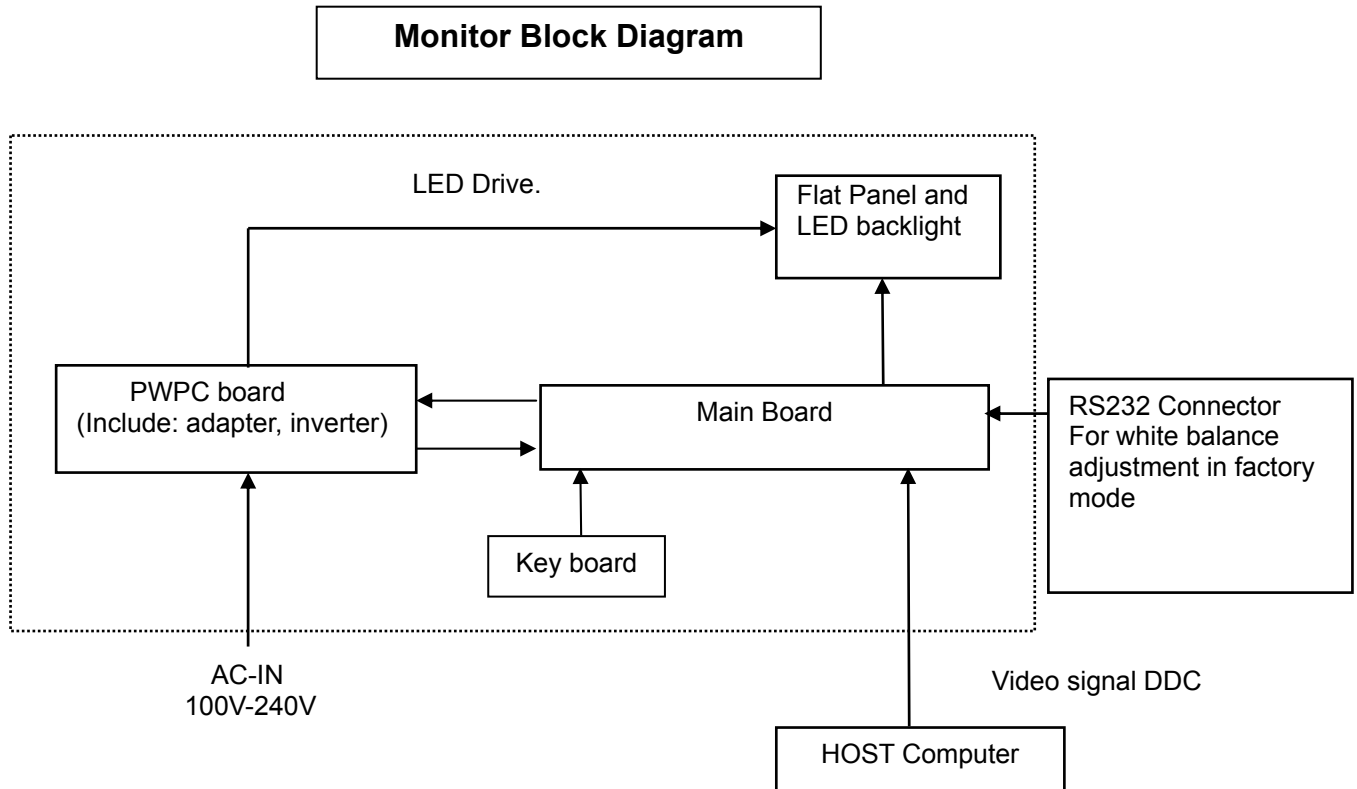
Monitor Specifications

Panel	Product name	i2340Ve	
	Driving system	TFT Color LCD	
	Viewable Image Size	58.42 cm diagonal	
	Pixel pitch	0.2652 mm(H) x 0.2652 mm(V)	
	Video	R, G, B Analog Interface & Digital Interface	
	Separate Sync.	H/V TTL	
	Display Color	16.7M Colors	
	Dot Clock	148.5 MHz	
Resolution	Horizontal scan range	30 kHz - 83 kHz	
	Horizontal scan Size(Maximum)	509.184mm	
	Vertical scan range	56 Hz - 75 Hz	
	Vertical scan Size(Maximum)	286.416mm	
	Optimal preset resolution	1920x1080(60 Hz)	
	Highest preset resolution	1920x1080(60 Hz)	
	Plug & Play	VESA DDC2B/CI	
	Input Connector	D-Sub 15pin & DVI-D	
	Input Video Signal	Analog: 0.7Vp-p(standard), 75 OHM, TMDS	
	Power Source	12Vdc,3.75A	
	Power Consumption	Active < 35W (TYPE) Standby < 1 W	
	Off Timer	0~24hours	Select timing to turn off the monitor.
Physical Characteristics	Connector Type	15-pin Mini D-Sub & DVI-D	
	Signal Cable Type	Detachable	
	Dimensions & Weight:		
	Height (with base)	585.6mm	
	Width	425.2mm	
	Depth	190mm	
	Weight (monitor only)	3.8kg	
Environmental	Temperature:		
	Operating	0° to 40°	
	Non-Operating	-25°to +55°	
	Humidity:		

LCD Monitor Description

The LCD MONITOR will contain a main board, a power board, a key board which house the flat panel control logic, brightness control logic and DDC.

The power board will provide AC to DC Inverter voltage to drive the backlight of panel and the main board chips each voltage.



3. Operating Instructions

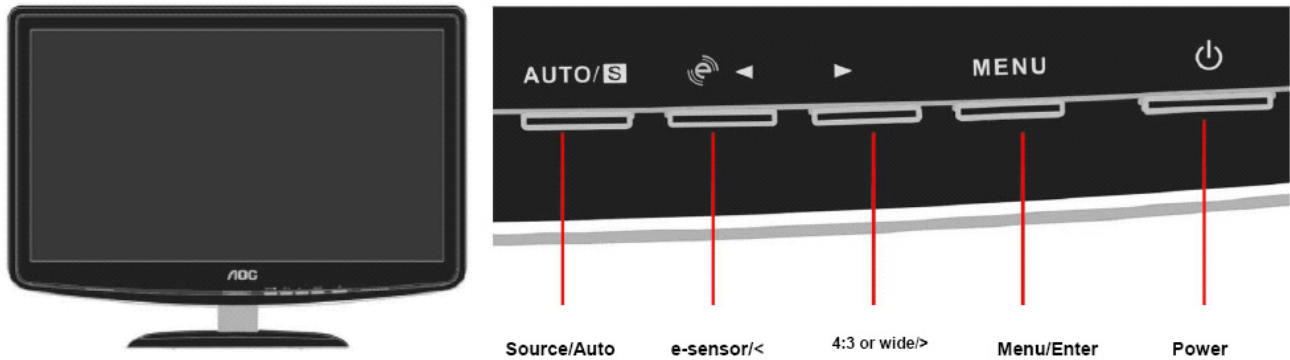
3.1 General Instructions

Press the power button to turn the monitor on or off. The other control knobs are located at front panel of the monitor (See Figure). By changing these settings, the picture can be adjusted to your personal preferences.

* The power cord should be connected.

* Press the power button to turn on the monitor. The power indicator will light up.

3.2 Control Buttons and Connections

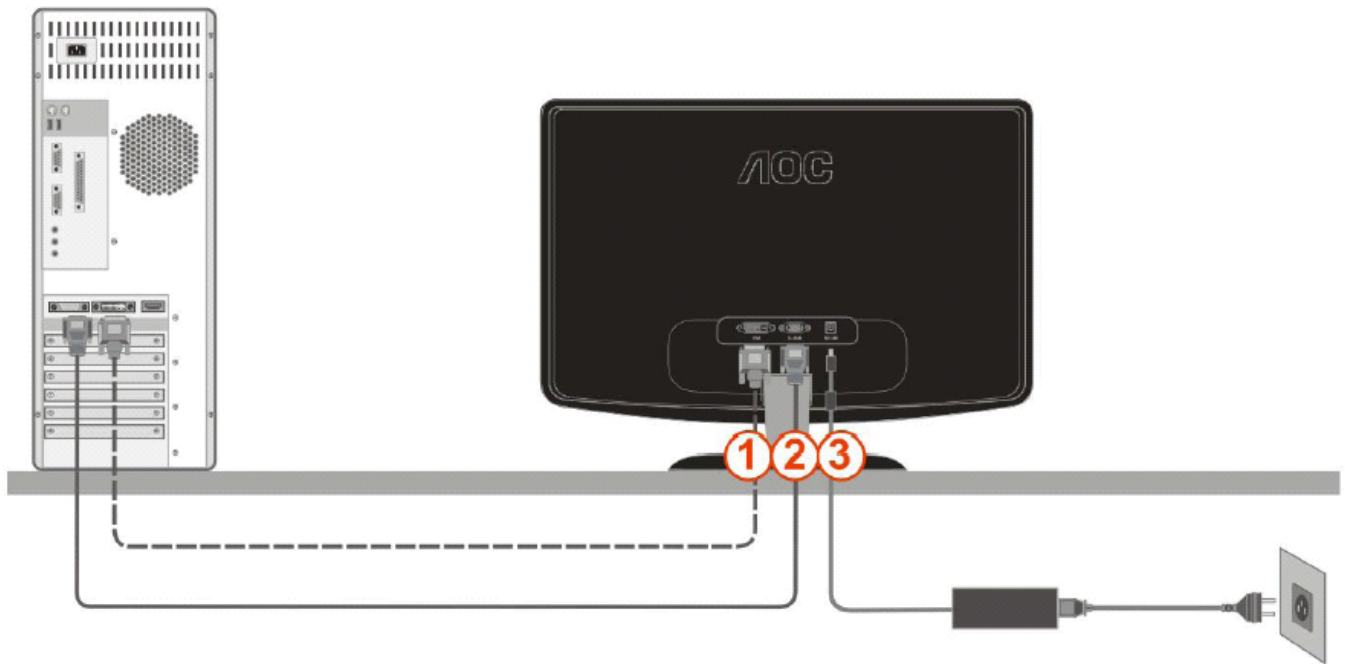


4:3 or wide image ratio hot key: When there is no OSD, press > continuously to change 4:3 or wide image ratio. (If the product screen size is 4:3 or input signal resolution is wide format, the hot key is disable to adjust)

e-Sensor hot key. When there is no OSD, Press < continuously to select the e - Sensor mode (e-Sensor mode hot key may not be available in all mode ls). e-Sensor: The infrared sensor can detect if user is in front of monitor and adjust monitor brightness automatically to save power. When it is on, we can select the detect range [Near, Average, Far] by using hot-key.

Auto configure hot key When there is no OSD, press Auto/Source button continuously about 2 second to do auto configure (Only for the

Source hot key When the OSD is closed, press Source button will be Source hot key function. Press Source button continuously to select the input source showed in the message bar , press Menu/Enter button to change to the source selected.



- 1.Power
- 2.Analog (DB-15 VGA cable)
- 3.Power

To protect equipment, always turn off the PC and LCD monitor before connecting.

1. Connect the power cable to the AC port on the back of the monitor.
2. Connect one end of the 15-pin D-Sub cable to the back of the monitor and connect the other end to the computer's D-Sub port.
3. (Optional – Requires a video card with DVI port) - Connect one end of the DVI cable to the back of the monitor and connect the other end to the computer's DVI port.
4. Connect the audio cable to audio in port on the back of the monitor.
5. Turn on your monitor and computer.

If your monitor displays an image, installation is complete. If it does not display an image, please refer [Troubleshooting](#).

3.3 OSD Setting



- 1) Press the **MENU-button** to activate the OSD window.
- 2) Press **◀ or ▶** to navigate through the functions. Once the desired function is highlighted, press the **MENU-button** to activate sub-menu . Once the desired function is highlighted, press **MENU-button** to activate it.
- 3) Press **◀ or ▶** to change the settings of the selected function. Press **◀ or ▶** to select another function in sub-menu . Press **AUTO** to exit . If you want to adjust any other function, repeat steps 2-3.
- 4) OSD Lock Function: To lock the OSD, press and hold the **MENU button** while the monitor is off and then press **power button** to turn the monitor on. To un-lock the OSD - press and hold the **MENU button** while the monitor is off and then press **power button** to turn the monitor on.
- 5) e-Sensor hot key: When there is no OSD, Press **◀** continuously to select the e-Sensor mode(e-Sensor mode hot key may not be available in all models).

Notes:

- 1) If the product has only one signal input, the item of "Input Select" is disable to adjust.
- 2) If the product screen size is 4:3 or input signal resolution is wide format, the item of "Image Ratio" is disable to adjust.
- 3) One of DCR, Color Boost, and Picture Boost functions is active, the other two function is turned off accordingly.

Luminance

1



Press **MENU** (Menu) to display menu.

2



Press ◀ or ▶ to select  (Luminance), and press **MENU** to enter.

3



Press ◀ or ▶ to select submenu, press **MENU** to enter, and press ◀ or ▶ to adjust.

4



Press **AUTO** to exit.


	Brightness	0-100	Backlight Adjustment
	Contrast	0-100	Contrast from Digital-register.
	Eco mode	Standard	Standard Mode
		Text	Text Mode
		Internet	Internet Mode
		Game	Game Mode
		Movie	Movie Mode
		Sports	Sports Mode
	Gamma	Gamma1	Adjust to Gamma1
		Gamma2	Adjust to Gamma 2
		Gamma3	Adjust to Gamma 3
	DCR	On/OFF	Enable dynamic contrast ratio

Image Setup

- 1



Press **MENU** (Menu) to display menu.
- 2




Press ◀ or ▶ to select  (Image Setup), and press **MENU** to enter.
- 3



Press ◀ or ▶ to select submenu, press **MENU** to enter, and press ◀ or ▶ to adjust.
- 4




Press **AUTO** to exit.

	Clock	0-100	Adjust picture Clock to reduce Vertical-Line noise.
	Phase	0-100	Adjust Picture Phase to reduce Horizontal-Line noise
	H.Position	0-100	Adjust the horizontal position of the picture.
	V.Position	0-100	Adjust the vertical position of the picture.


Color Temperature


1




Press **MENU** (Menu) to display menu.

2




Press ◀ or ▶ to select  (Color Temperature), and press **MENU** to enter.

3




Press ◀ or ▶ to select submenu, press **MENU** to enter, and press ◀ or ▶ to adjust.

4



Press **AUTO** to exit.

	Warm	6500K	Recall Warm Color Temperature from EEPROM.
	Normal	7300K	Recall Normal Color Temperature from EEPROM.
	Cool	9300K	Recall Cool Color Temperature from EEPROM.
	sRGB		Recall sRGB Color Temperature from EEPROM.
	User	Red	Red Gain from Digital-register
		Green	Green Gain Digital-register.
		Blue	Blue Gain from Digital-register

Color Boost


1



Press **MENU** (Menu) to display menu.

2



Press ◀ or ▶ to select  (Color Boost), and press **MENU** to enter.

3




Press ◀ or ▶ to select submenu, press **MENU** to enter, and press ◀ or ▶ to adjust.

4



Press **AUTO** to exit.


	Full Enhance	on or off	Disable or Enable Full Enhance Mode
	Nature Skin	on or off	Disable or Enable Nature Skin Mode
	Green Field	on or off	Disable or Enable Green Field Mode
	Sky-blue	on or off	Disable or Enable Sky-blue Mode
	AutoDetect	on or off	Disable or Enable AutoDetect Mode
	Demo	on or off	Disable or Enable Demo

Picture Boost

1



Press **MENU** (Menu) to display MENU.

Press ◀ or ▶ to select  (Picture Boost); and press **MENU** to enter.

2



Press ◀ or ▶ to select Bright Frame. Select “on” to activate Picture Boost.

3




Press ◀ or ▶ to select submenu, press **MENU** to enter, and press ◀ or ▶ to adjust.

4



Press **AUTO** to exit.

	Frame Size	14-100	Adjust Frame Size
	Brightness	0-100	Adjust Frame Brightness
	Contrast	0-100	Adjust Frame Contrast
	H. position	0-100	Adjust Frame horizontal Position
	V.position	0-100	Adjust Frame vertical Position
	Bright Frame	on or off	Disable or Enable Bright Frame

OSD Setup


1



Press **MENU** (Menu) to display menu.

2



Press ◀ or ▶ to select  (OSD Setup), and press **MENU** to enter.

3




Press ◀ or ▶ to select submenu, press **MENU** to enter, and press ◀ or ▶ to adjust.

4



Press **AUTO** to exit.

	OSD Setup		
	H.Position	0-100	Adjust the horizontal position of OSD
	V.Position	0-100	Adjust the vertical position of OSD
	Timeout	5-120	Adjust the OSD Timeout
	Transparence	0-100	Adjust the transparence of OSD
	Language		Select the OSD language

Extra


1



Press **MENU** (Menu) to display menu.

2



Press ◀ or ▶ to select  (OSD Setup), and press **MENU** to enter.

3




Press ◀ or ▶ to select submenu, press **MENU** to enter, and press ◀ or ▶ to adjust.

4



Press **AUTO** to exit.

	Input Select	Auto Analog Digital	Select to Auto Detect input signal Select Analog Sigal Source as Input Select Digital Sigal Source as Input
	Auto Config	yes or no	Auto adjust the picture to default
	Image Ratio	wide or 4:3	Select wide or 4:3 format for display
	DDC-CI	yes or no	Turn ON/OFF DDC-CI Support
	Off Timer	0~24hours	Select timing to turn off the monitor.
	Information		Show the information of the main image and sub-image source

Reset

1



Press **MENU** (Menu) to display menu.



Press ◀ or ▶ to select (Reset), and press **MENU** to enter.

2



Press ◀ or ▶ to select YES or NO.

3



Press **MENU** to exit.

4



	Reset	yes or no	Reset the menu to default
---	-------	-----------	---------------------------

Exit

1



Press **MENU** (Menu) to display menu.



2



Press ◀ or ▶ to select  (Exit); and press **MENU** to enter.

	Exit		Exit the main OSD
---	------	--	-------------------

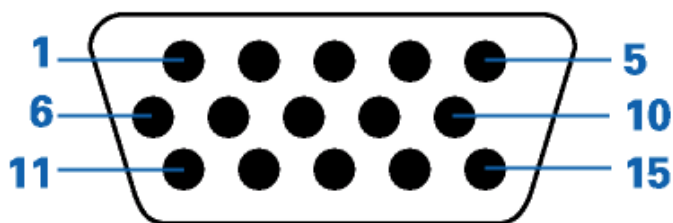
LED Indicator

Status	LED Color	
Full Power Mode	Blue	
Active-off Mode	Orange	

4. Input/Output Specification

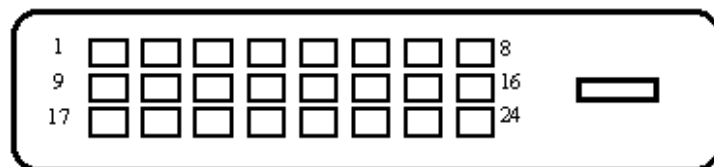
4.1 Input Signal Connector

Analog connectors



Pin Number	15-Pin Side of the Signal Cable
1	Video-Red
2	Video-Green
3	Video-Blue
4	N.C.
5	Detect Cable
6	GND-R
7	GND-G
8	GND-B
9	+5V
10	Ground
11	N.C.
12	DDC-Serial data
13	H-sync
14	V-sync
15	DDC-Serial clock

DVI connectors



Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
1	TMDS Data 2-	9	TMDS Data 1-	17	TMDS Data 0-
2	TMDS Data 2+	10	TMDS Data 1+	18	TMDS Data 0+
3	TMDS Data 2/4 Shield	11	TMDS Data 1/3 Shield	19	TMDS Data 0/5 Shield
4	TMDS Data 4-	12	TMDS Data 3-	20	TMDS Data 5-
5	TMDS Data 4+	13	TMDS Data 3+	21	TMDS Data 5+
6	DDC Clock	14	+5V Power	22	TMDS Clock Shield
7	DDC Data	15	Ground(for+5V)	23	TMDS Clock +
8	N.C.	16	Hot Plug Detect	24	TMDS Clock -

4.2 Preset Display Modes

STAND	RESOLUTION	Horizontal	Vertical
VGA	640×480@60Hz	31.469	59.94
	640×480@72Hz	37.861	72.809
	640×480@75Hz	37.5	75
SVGA	800×600@56Hz	35.156	56.25
	800×600@60Hz	37.879	60.317
	800×600@72Hz	48.077	72.188
	800×600@75Hz	46.875	75
XGA	1024×768@60Hz	48.363	60.004
	1024×768@70Hz	56.476	70.069
	1024×768@75Hz	60.023	75.029
XGA	1152×864@75Hz	67.5	75.00
XGA	1280×1024@60Hz	63.981	60.02
XGA	1280×1024@75Hz	79.976	75.025
WXGA	1440×900@60Hz	55.935	59.887
WSXGA+	1680×1050@60Hz	65.29	59.954
HDTV	1920×1080@60Hz	67.5	60
DOS	720×400@70Hz	31.469	70.087
VGA	640×480@67Hz	35	66.667
SVGA	832×624@75Hz	49.725	74.551

4.3 Panel Specification

4.3.1 General Features

LM230WF3 is a Color Active Matrix Liquid Crystal Display with a Light Emitting Diode (White LED) backlight. The matrix employs a-Si Thin Film Transistor as the active element. It is a transmissive type display operating in the normally black mode. It has a 23 inch diagonally measured active display area with FHD resolution (1080 vertical by 1920 horizontal pixel array). Each pixel is divided into Red, Green and Blue sub-pixels or dots which are arranged in vertical stripes. Gray scale or the brightness of the sub-pixel color is determined with a 8-bit gray scale signal for each dot, thus, presenting a palette of more than 16,7M colors with A-FRC (Advanced Frame Rate Control).

4.3.2 General Specifications

Active Screen Size	23 inches(58.42cm) diagonal
Outline Dimension	533.2(H) x 312.0(V) x 10.5(D) mm (Typ.)
Pixel Pitch	0.2652 mm x 0.2652 mm
Pixel Format	1920 horiz. By 1080 vert. Pixels RGB stripes arrangement
Color Depth	16,7M colors (6bit + A-FRC)
Luminance, White	250 cd/m ² (Center 1 Point, Typ.)
Viewing Angle(CR>10)	View Angle Free (R/L 178(Typ.), U/D 178(Typ.))
Power Consumption	Total 25.2 Watt (Typ.) (4.1 Watt @V _{LCD} , 21.1 Watt @I _s =110mA)
Weight	1,580g (typ.)
Display Operating Mode	Transmissive mode, normally black
Surface Treatment	Hard coating(3H), Anti-glare treatment of the front polarizer

4.3.3 Electrical Characteristics

(Ta= 25± 2°C, V_{LCD}=5.0V, V_{LCD}=5.0V, Fv=60Hz.)

Parameter	Symbol	Values			Unit
		Min	Typ	Max	
MODULE :					
Power Supply Input Voltage	VLCD	4.5	5	5.5	Vdc
Permissive Power Input Ripple	VdRF			400	mVp-p
Power Supply Input Current	ILCD	-	810	930	mA
		-	910	1045	mA
Power Consumption	Pc TYP	-	4.1	4.7	Watt
	Pc MAX	-	4.6	5.3	Watt
Rush current	IRUSH	-	-	3.0	A

LED Bar Electrical Characteristics

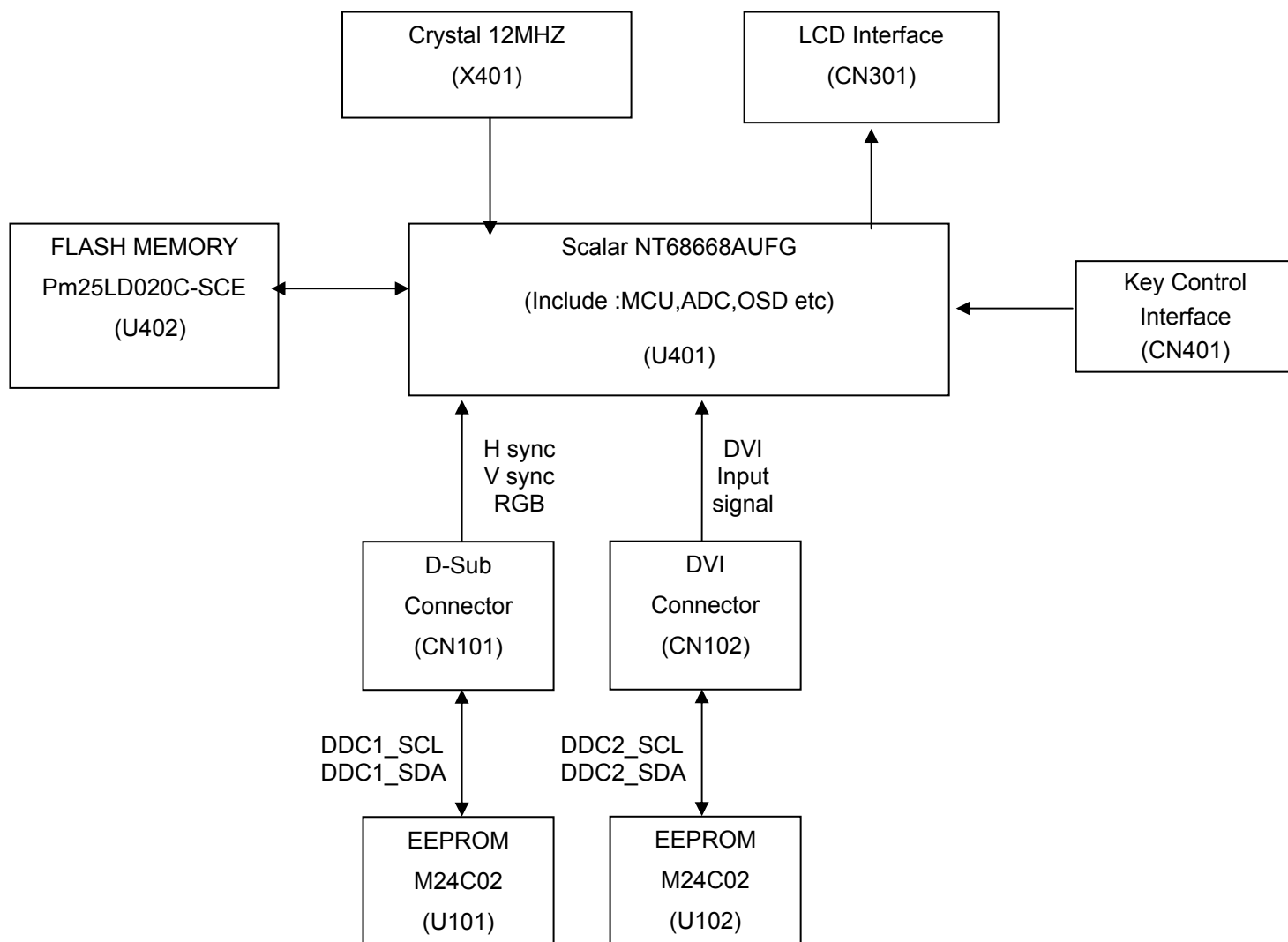
Parameter	Symbol	Condition	Values			Unit
			Min.	Typ.	Max.	
LED :						
LED String Current	Is		-	110	120	mA
LED String Voltage	Vs		45	48	51	V
Power Consumption	PBar		19.80	21.12	22.44	Watt
LED Life Time	LED_LT		30,000	-	-	Hrs

4.3.4 Optical Characteristics

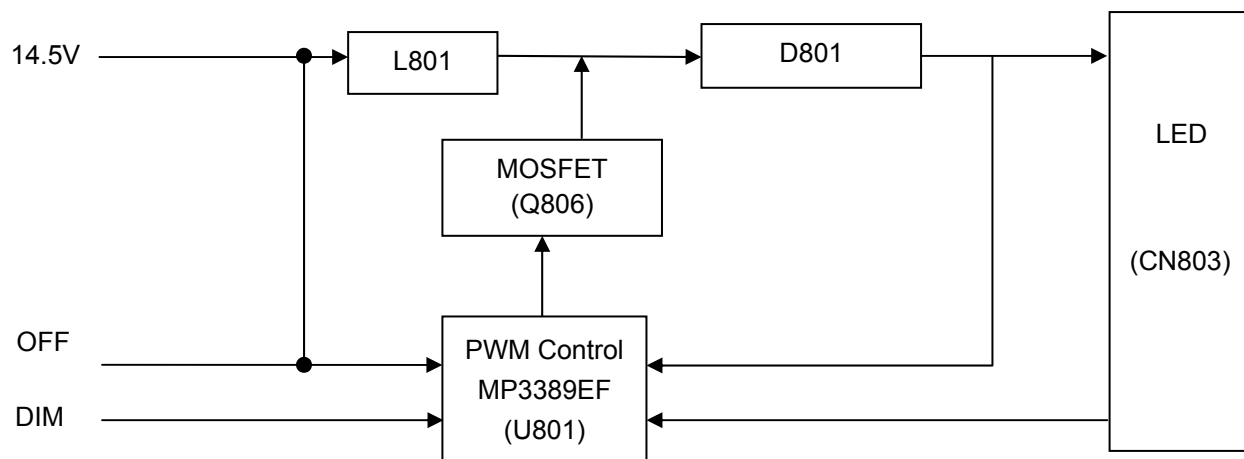
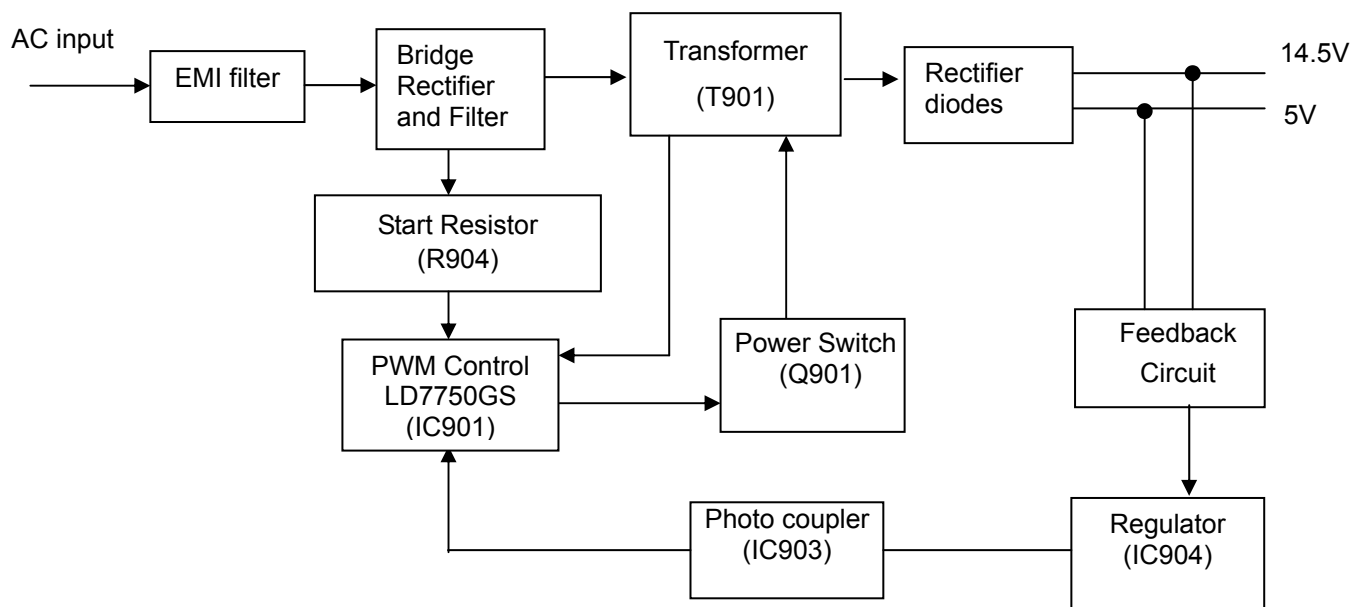
Parameter		Symbol	Values			Units
			Min	Typ	Max	
Contrast Ratio		CR	600	1000	-	
Surface Luminance, white		L_{WH}	200	250	-	cd/m ²
Luminance Variation		δ_{WHITE}	75	-	-	%
Response Time	Gray To Gray	T_{GTG_AVR}	-	14	25	ms
	Gray-to-Gray (BW)	G to G _{BW}	-	8	-	ms
Color Coordinates [CIE1931] (By PR650)	RED	Rx	Typ -0.03	0.634	Typ +0.03	
		Ry		0.333		
	GREEN	Gx		0.304		
		Gy		0.627		
	BLUE	Bx		0.150		
		By		0.068		
	WHITE	Wx		0.313		
		Wy		0.329		
Color Shift (Avg. $\Delta u'v' < 0.02$)	Horizontal	θ_{CST_H}	-	140	-	Degree
	Vertical	θ_{CST_V}	-	100	-	
Viewing Angle (CR>10)						
General	Horizontal	θ_H	170	178	-	Degree
	Vertical	θ_V	170	178	-	
GSR @ 60dgree (Gamma shift rate)	Horizontal	δ_{Gamma_H}	-	-	20	%
	Vertical	δ_{Gamma_V}	-	-	20	
WPT (White Point Tracking)		-	-300	G255 CCT	+700	K
Color gamut (CG, CIE1931)			-	72	-	%
Gray Scale		-		2.2		

5. Block Diagram

5.1 Main Board



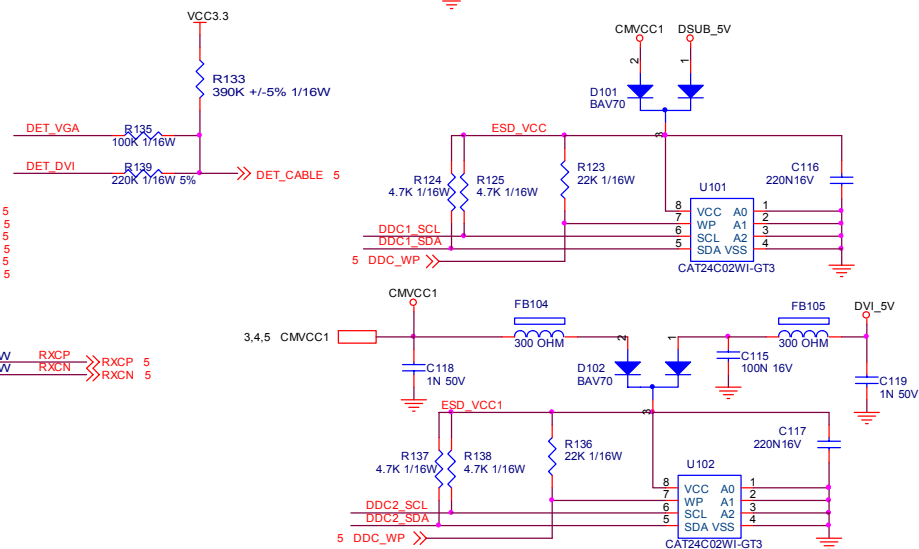
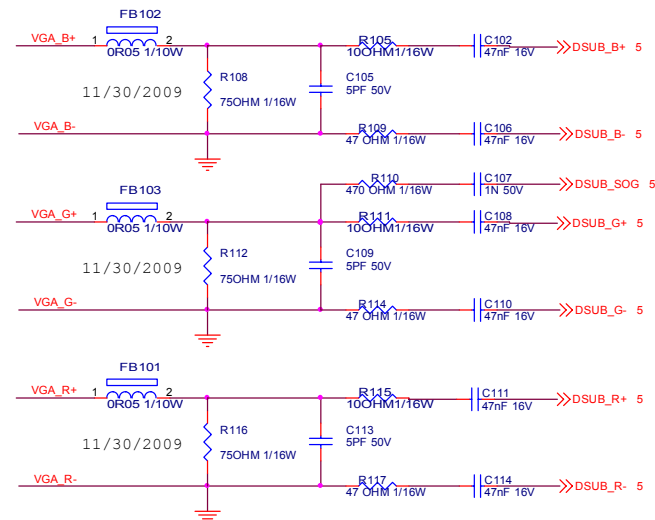
5.2 Power Board

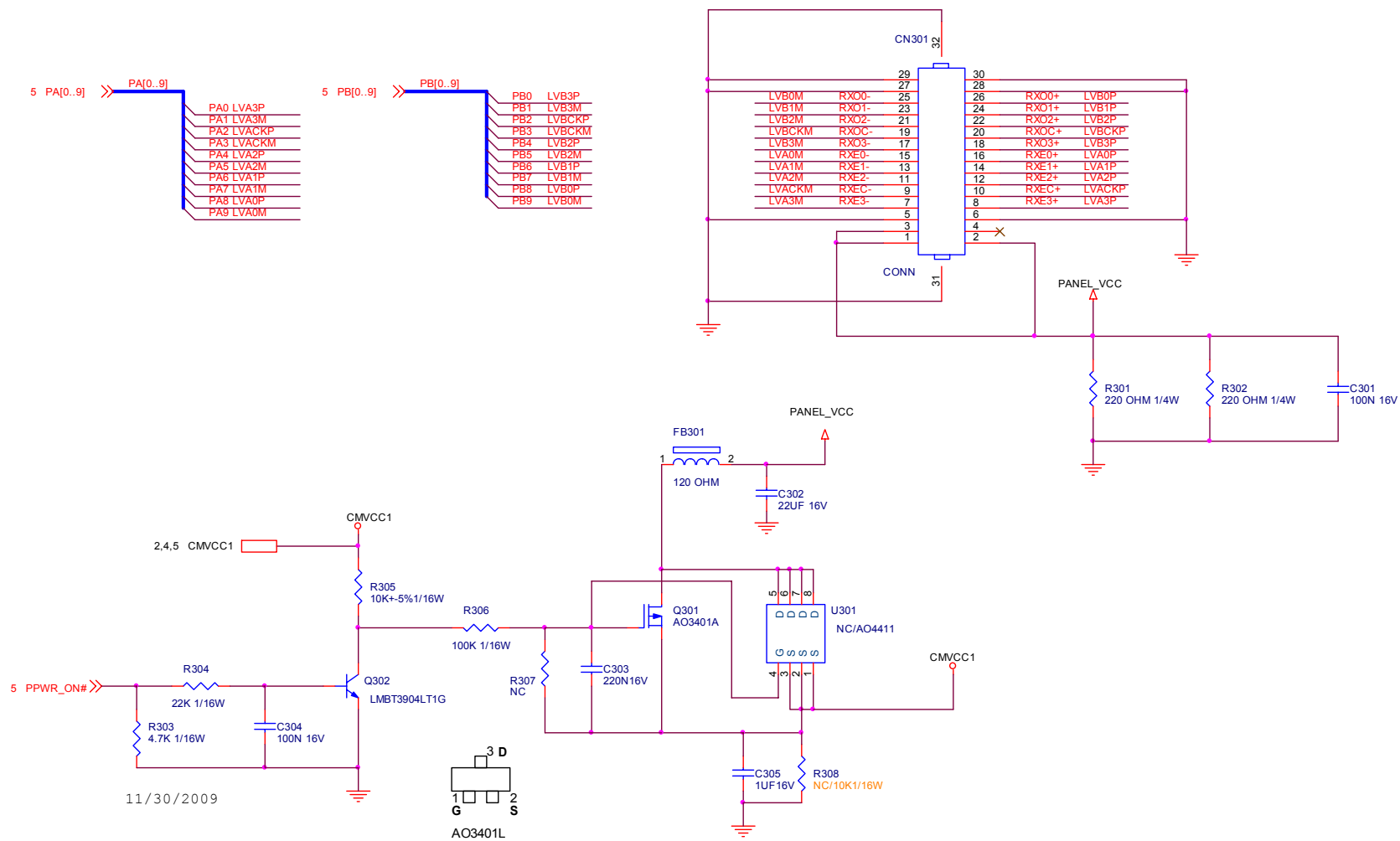


6. Schematic

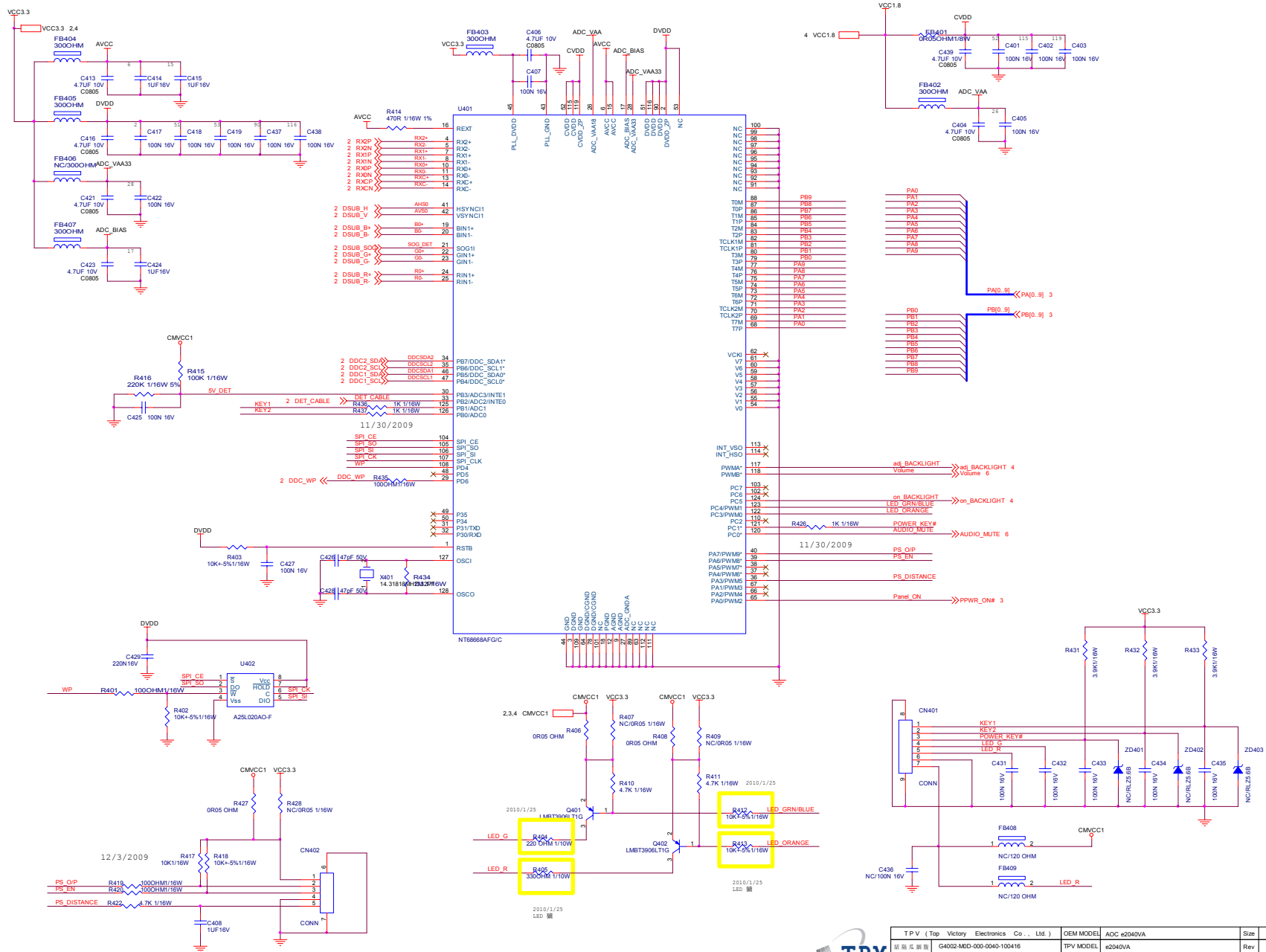
6.1 Main Board

715G4002M01000004S





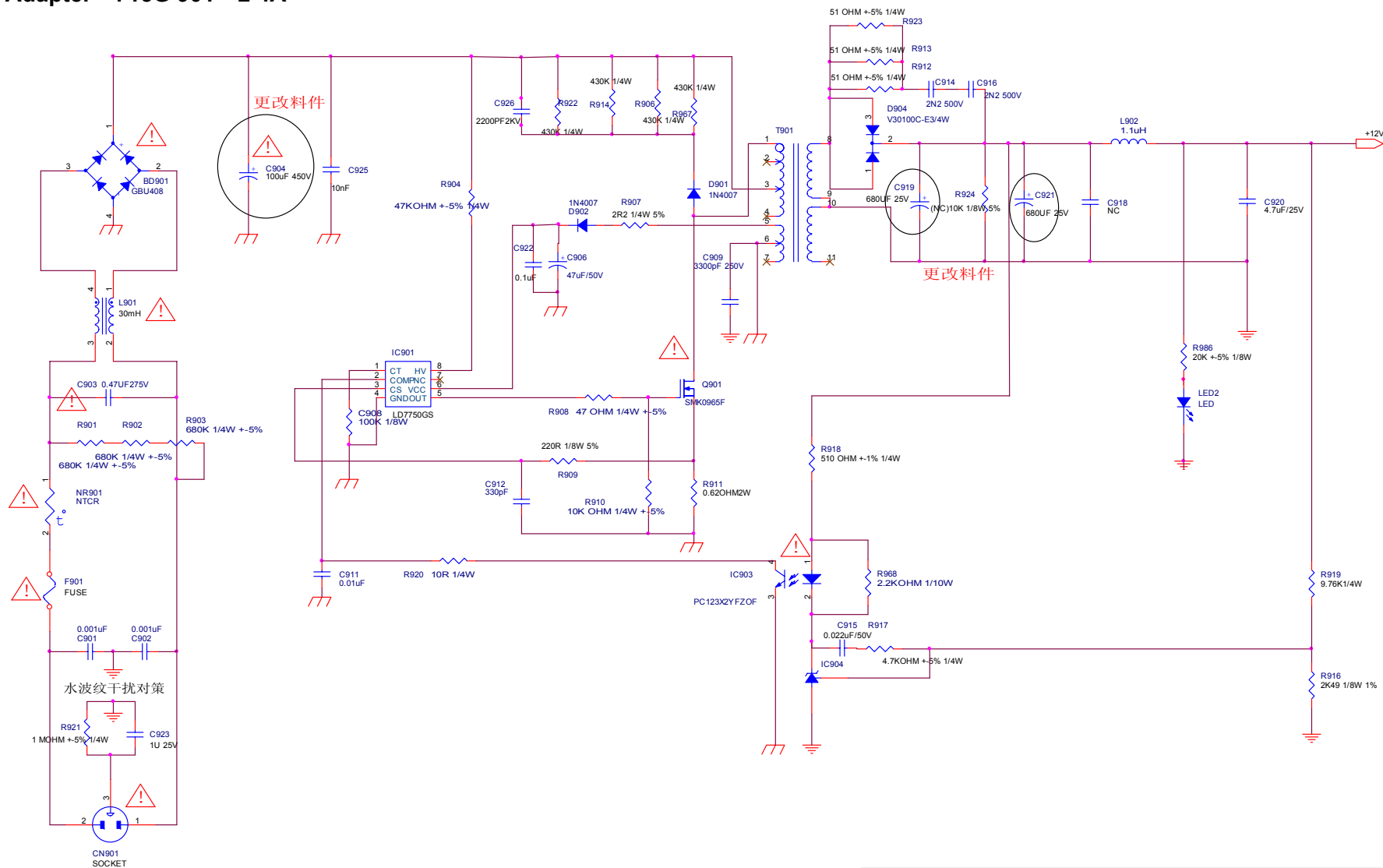
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	AOC e2040VA	Size	B
話隔瓜捌腹	G4002-M0D-000-0040-100416	TPV MODEL	Rev	C
Key Component	3.0.OUTPUT	PCB NAME	称爹	<称爹>
Date	Tuesday, April 27, 2010	Sheet	3 of 6	



TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	ADC e2040VA	Size	C
前版无更改	G4002-MD-000-0040-100416	TPV MODEL	e2040VA	Rev
Key Component	5.0 SCALER	PCB NAME		参考
Date	Tuesday, April 27, 2010	Sheet	5 of 6	<前8>

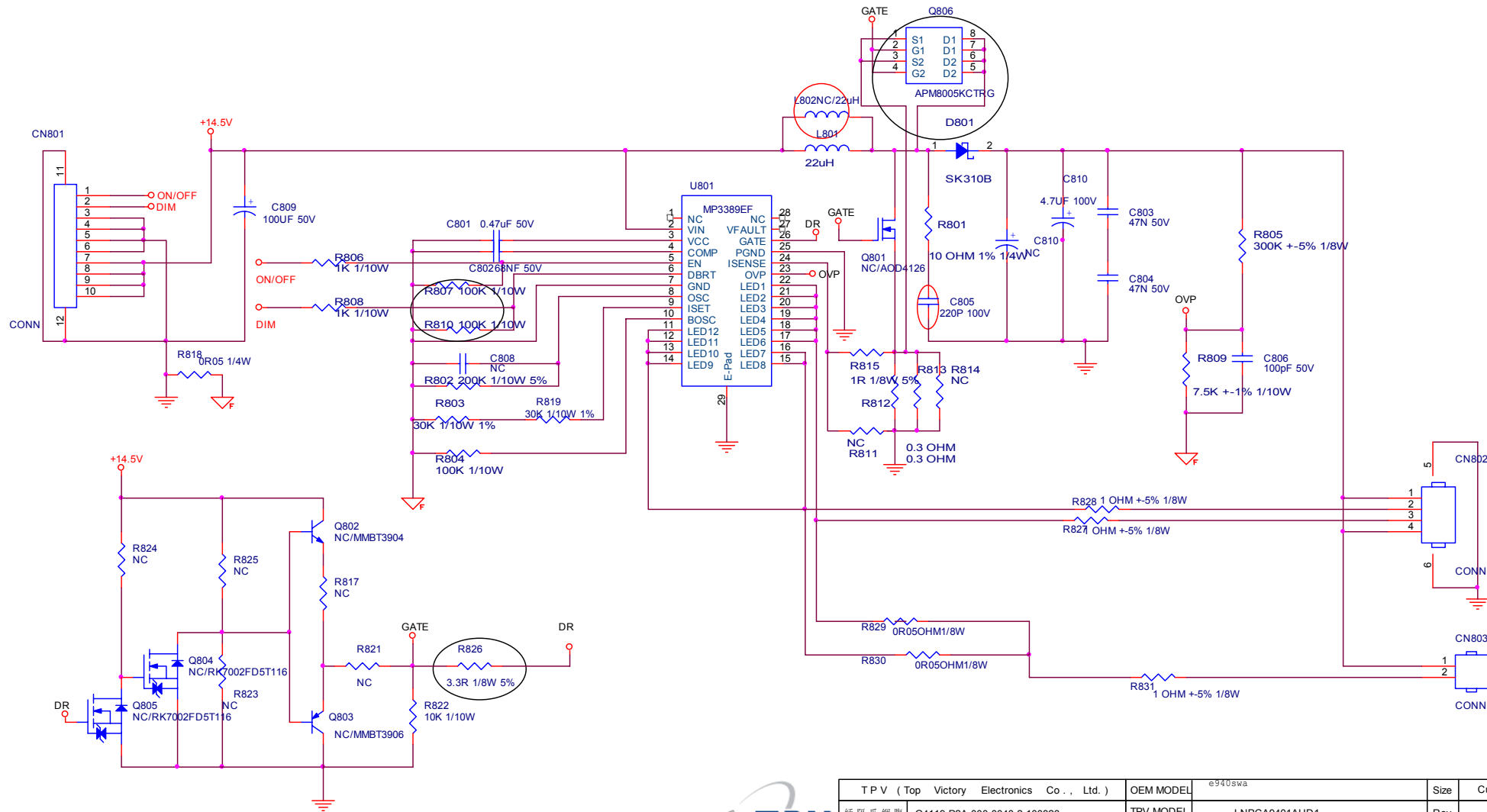
6.2 Power Board

Adapter 715G 901 2 4A



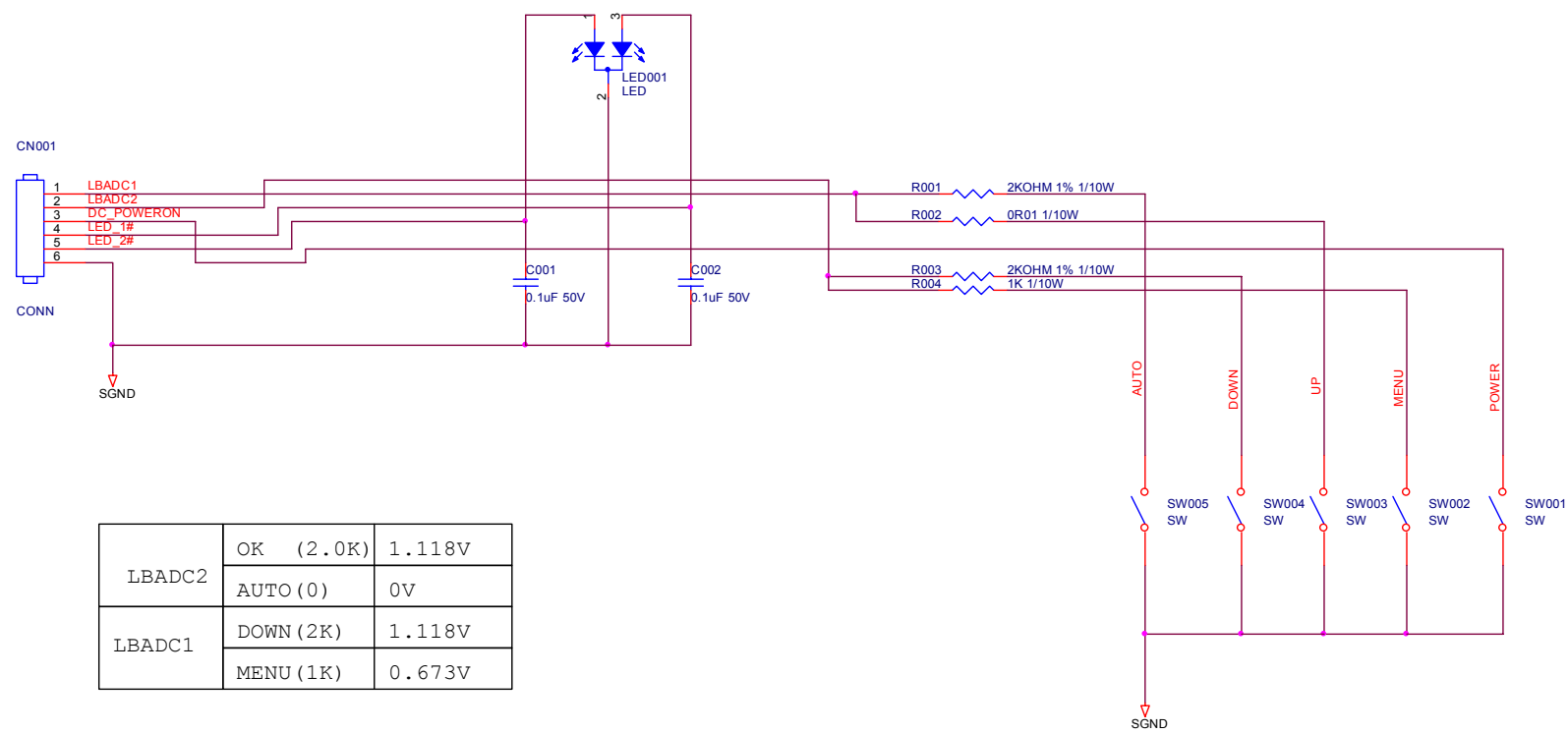
TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL	HP X20/X22/X23LED	Size	A3
結隔風風囊	G901-1-15-X-3-100201	TPV MODEL	ADPCA1248HA1	Rev	1.0
Key Component	02.ADAPTER	PCB NAME	715G901-1-15	稱 號	<稱號>
Date	Wednesday, June 30, 2010	Sheet	2 of 2		

Converter 715G4119P01002004C

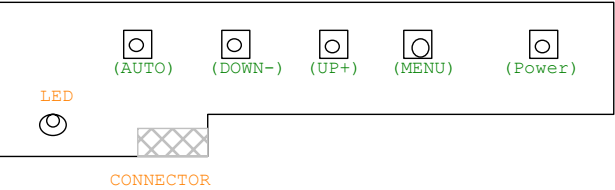


TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	e94Uswa	Size	Custom
振興光電	G4119-P2A-000-0040-2-100826	TPV MODEL	Rev	B
Key Component	01.CONVERTER	PCB NAME	715G4119-P2A-000-004C	稱參
Date		Sheet	1 of 2	ODM MODEL

6.3 Key Board
715G4014K01000004C

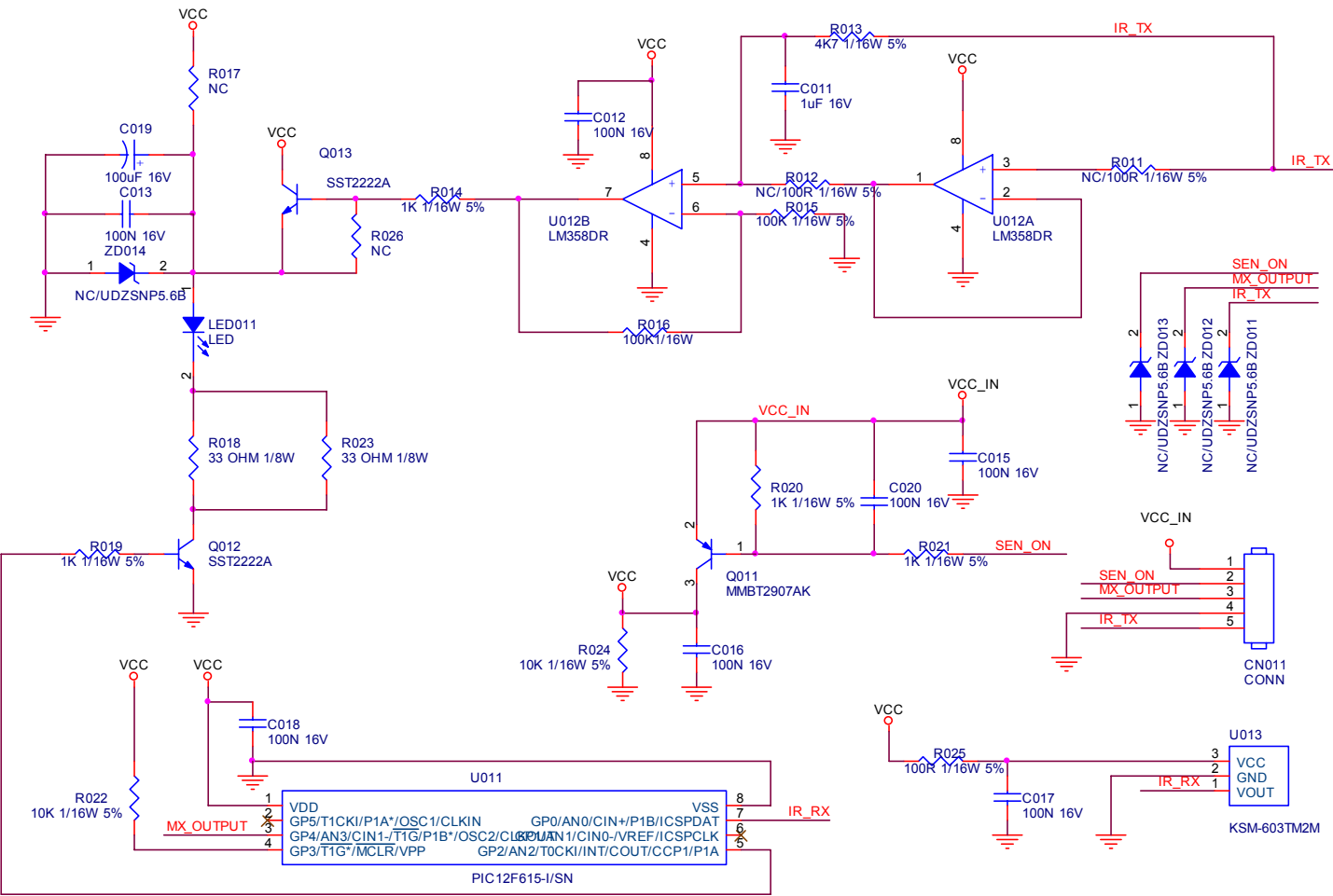


LBADC2	OK (2.0K)	1.118V
	AUTO (0)	0V
LBADC1	DOWN (2K)	1.118V
	MENU (1K)	0.673V



TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	N/A	Size	B
話隔瓜銅股	TPV MODEL	e2040V	Rev	D
Key Component	2.0.key	PCB NAME	TBD	称爹
Date	Thursday, November 05, 2009	Sheet	2 of 2	<称爹>

6.4 Light Sensor Board
715G3995T01000004C

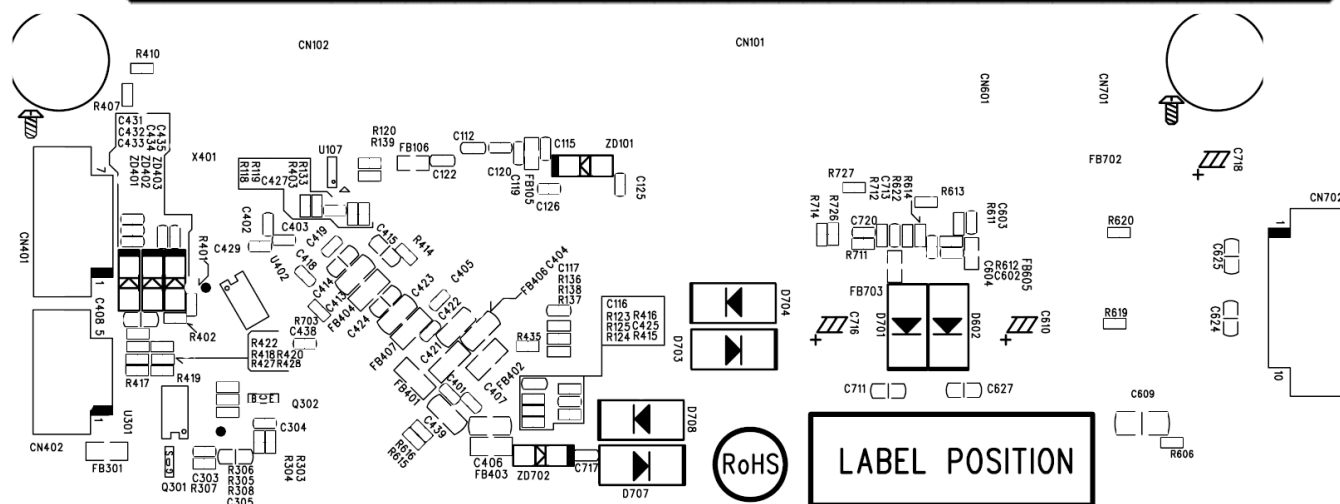
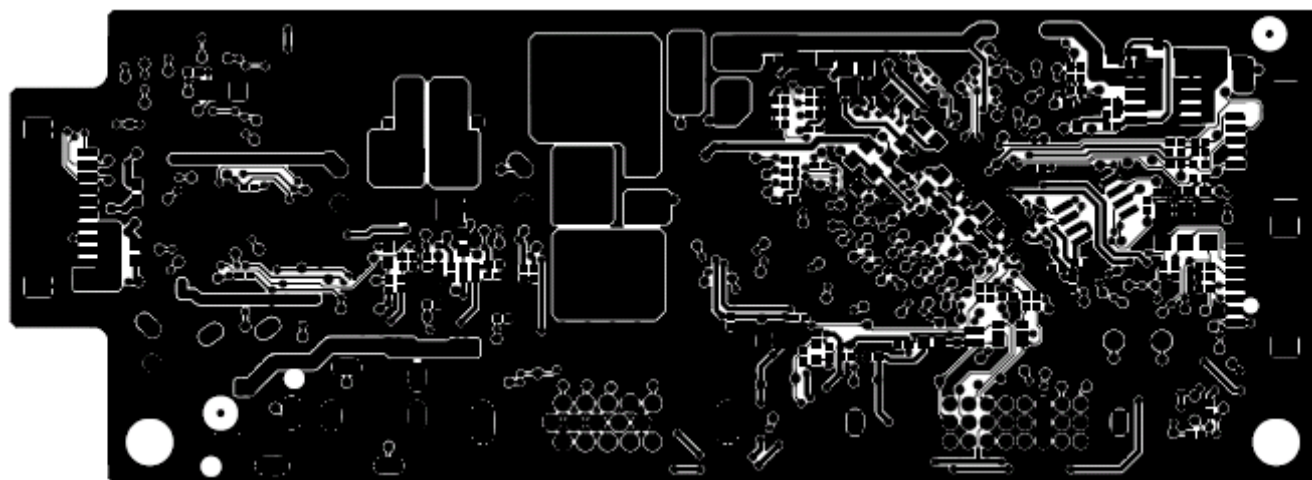
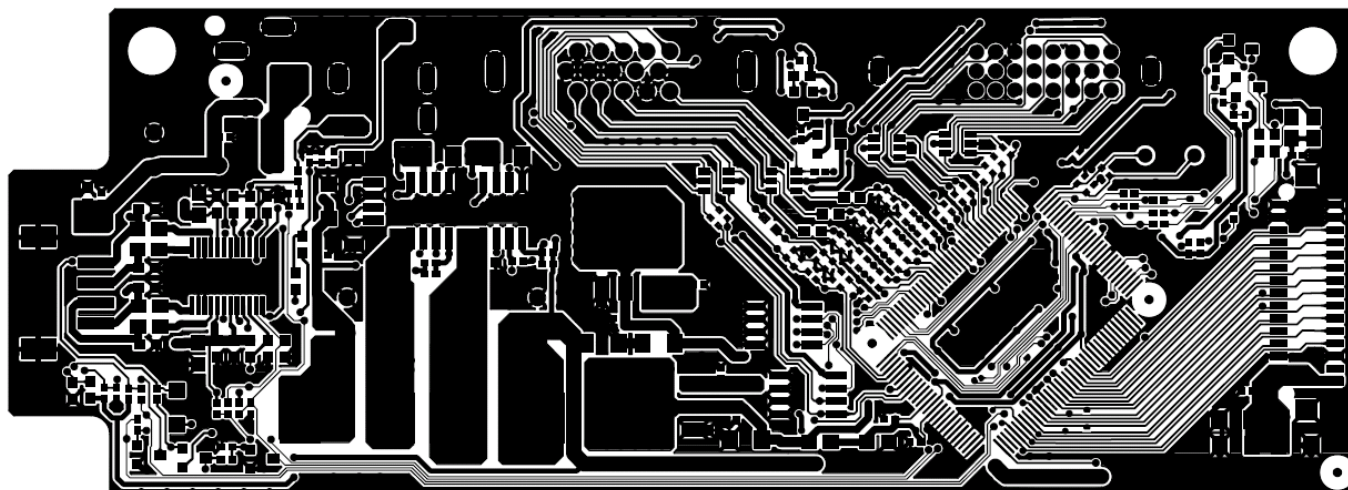


T P V (Top Victory Electronics Co., Ltd.)	OEM MODEL	40TH	Size	A
絲隔瓜網膜 G3995-T01-000-0040-100415	TPV MODEL	40TH	Rev	A
Key Component PIC12F615-I/SN	PCB NAME	Power Sensor	稱爹	<稱爹>
Date Friday, April 16, 2010	Sheet	2 of 2		

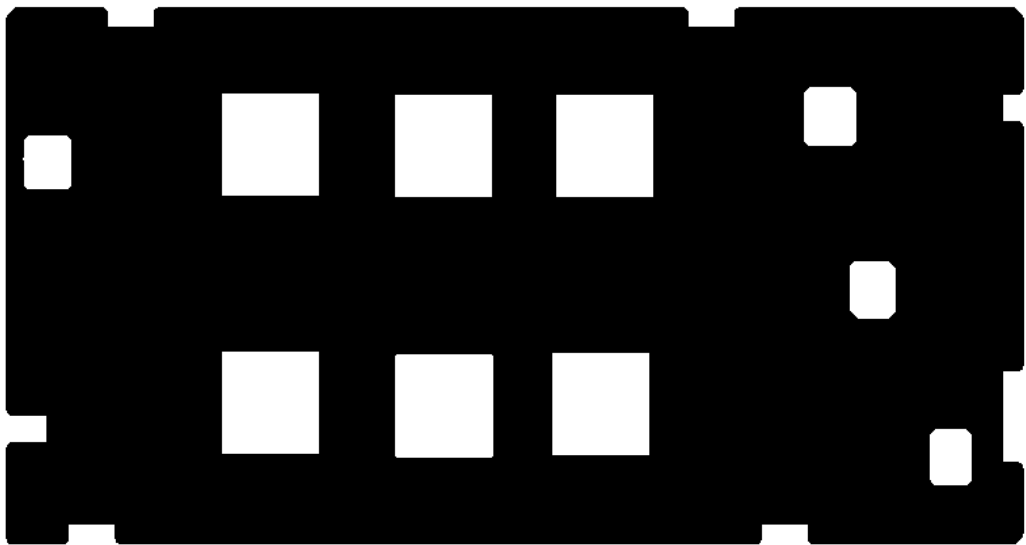
7. PCB Layout

7.1 Main Board

715G4002M01000004S

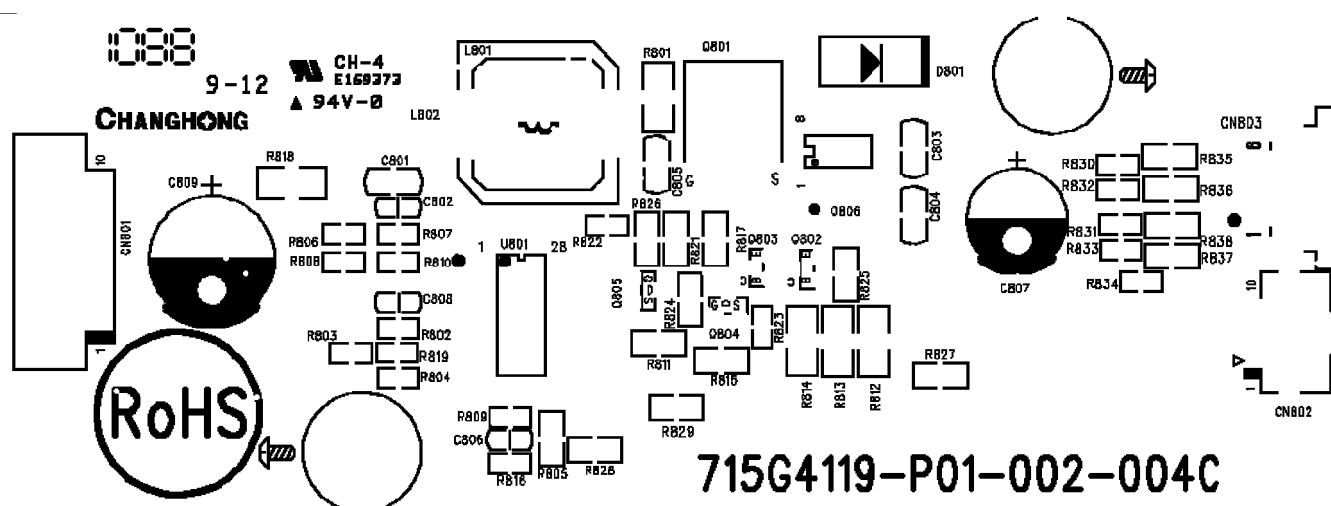
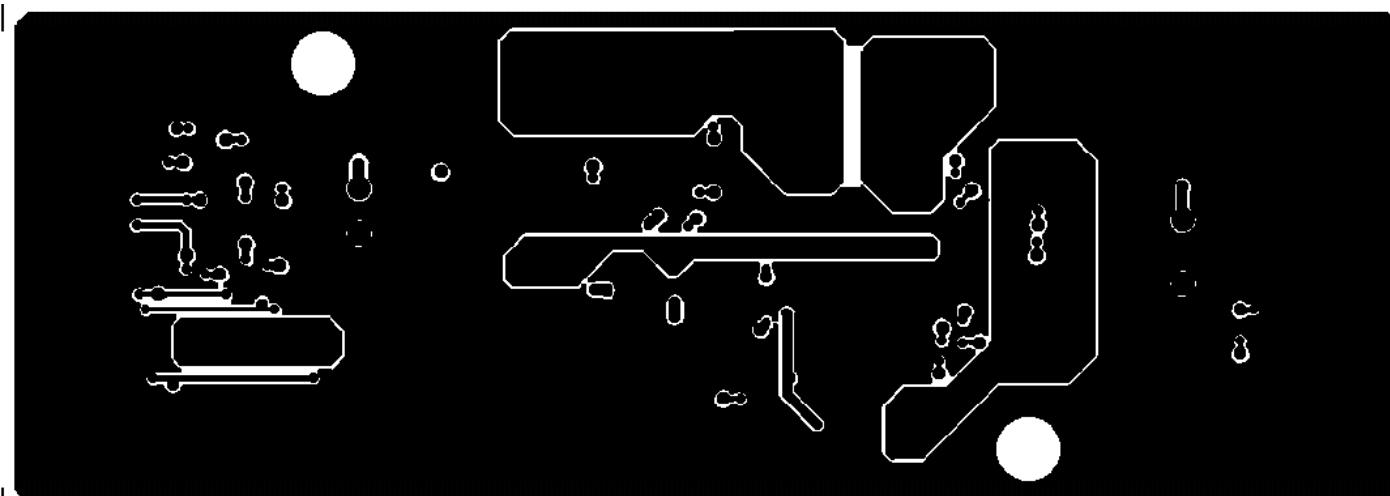
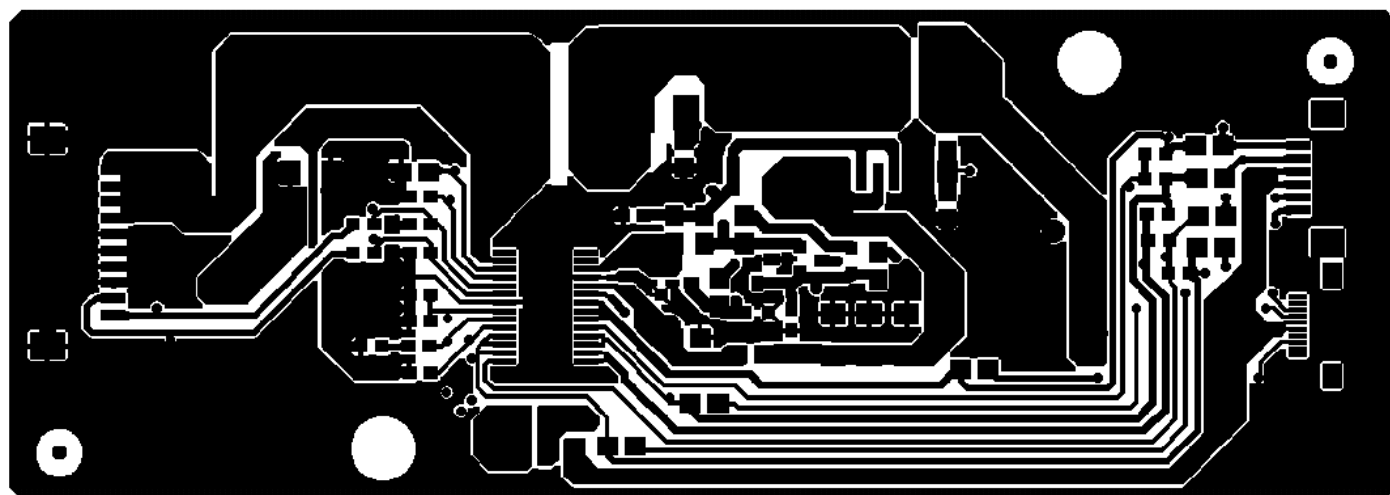


7.2 Power Board
Adapter 715G 901 2 4A



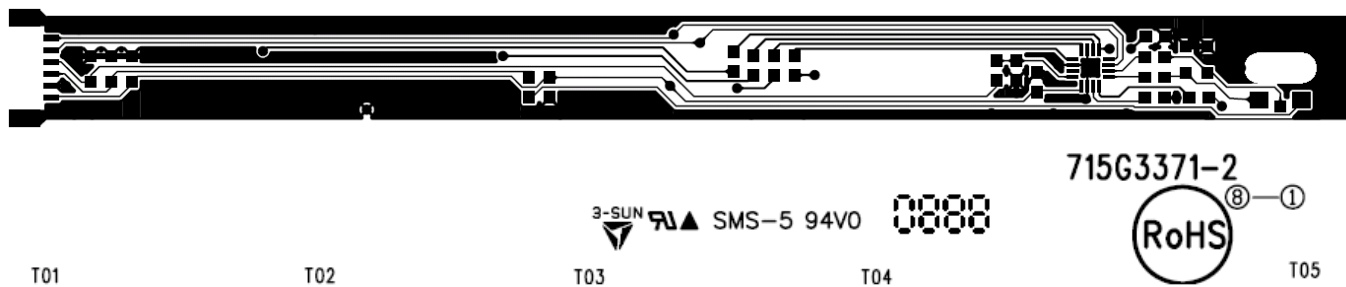
715G901-2-4A 2009/07/11

E168066
NY-R4
SAV-B-A RJ
8888



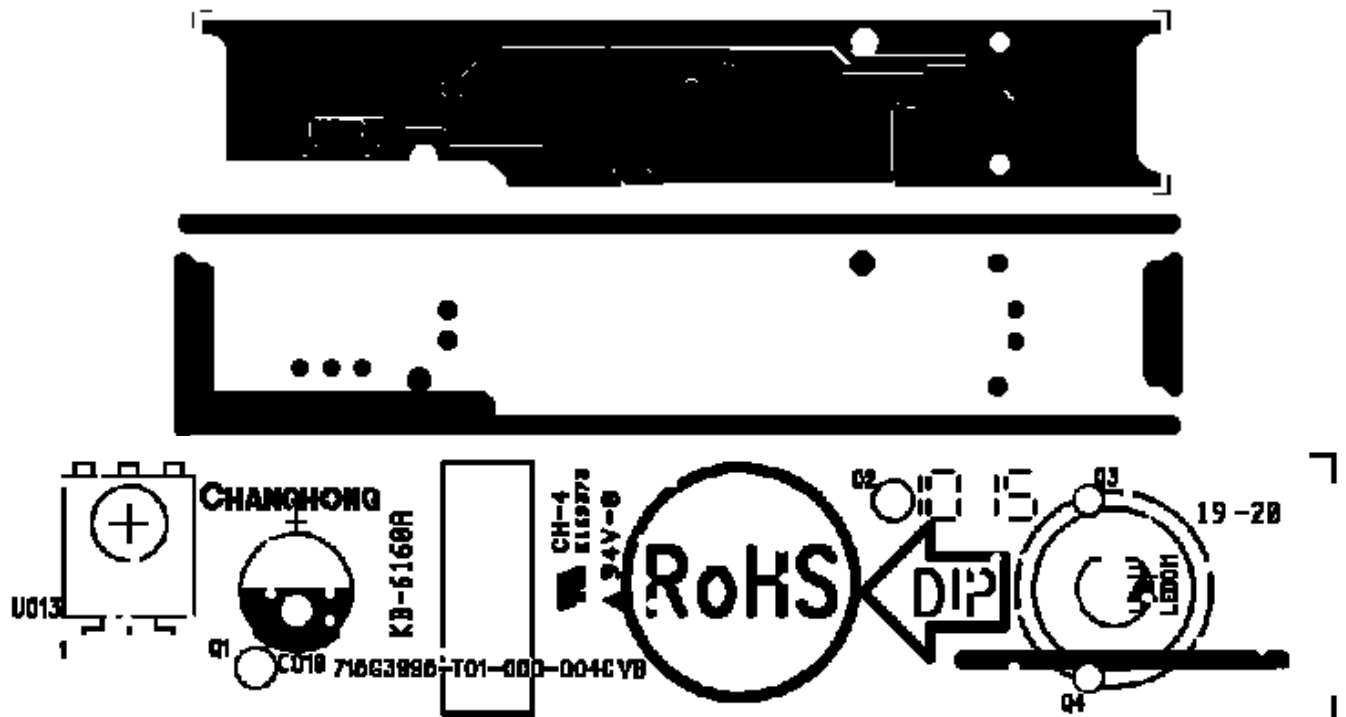
7.3 Key Board

715G3371 2



7.4 Light Sensor Board

715G3995T01000004C



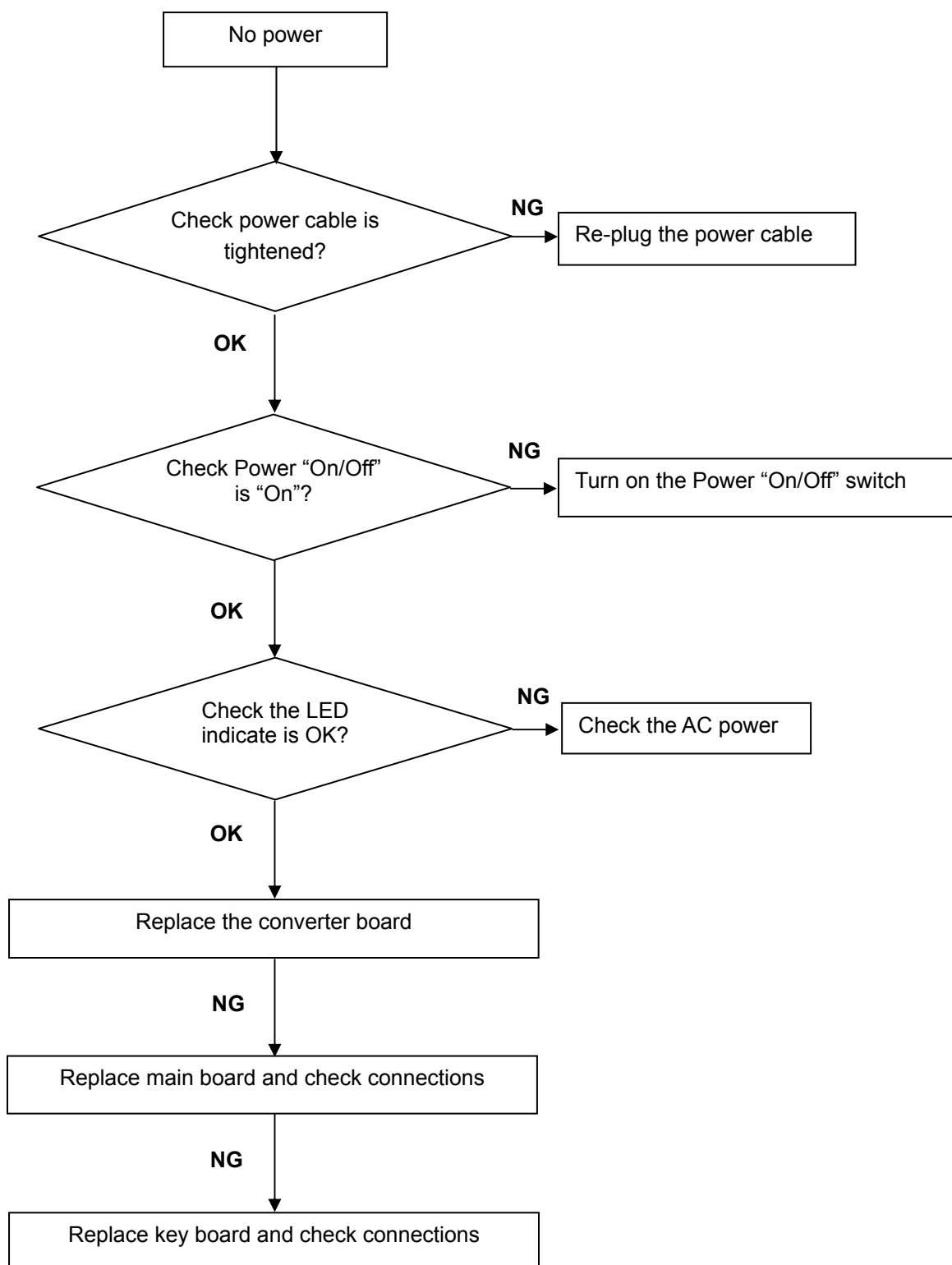
8. Maintainability

8.1 Equipments and Tools Requirement

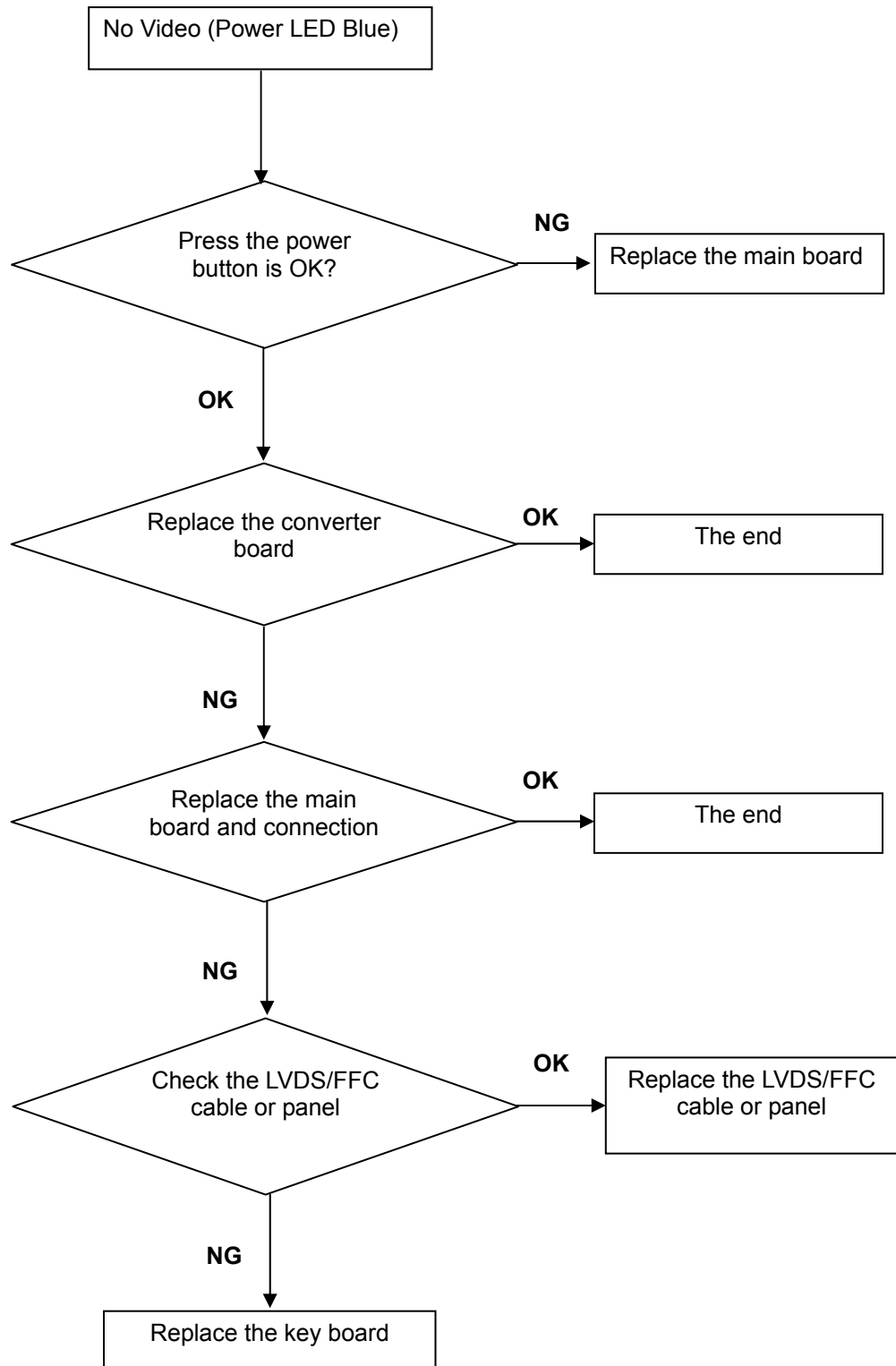
1. Voltmeter.
2. Oscilloscope.
3. Pattern Generator.
4. DDC Tool with an IBM Compatible Computer.
5. Alignment Tool.
6. LCD Color Analyzer.
7. Service Manual.
8. User Manual.

8.2 Trouble Shooting

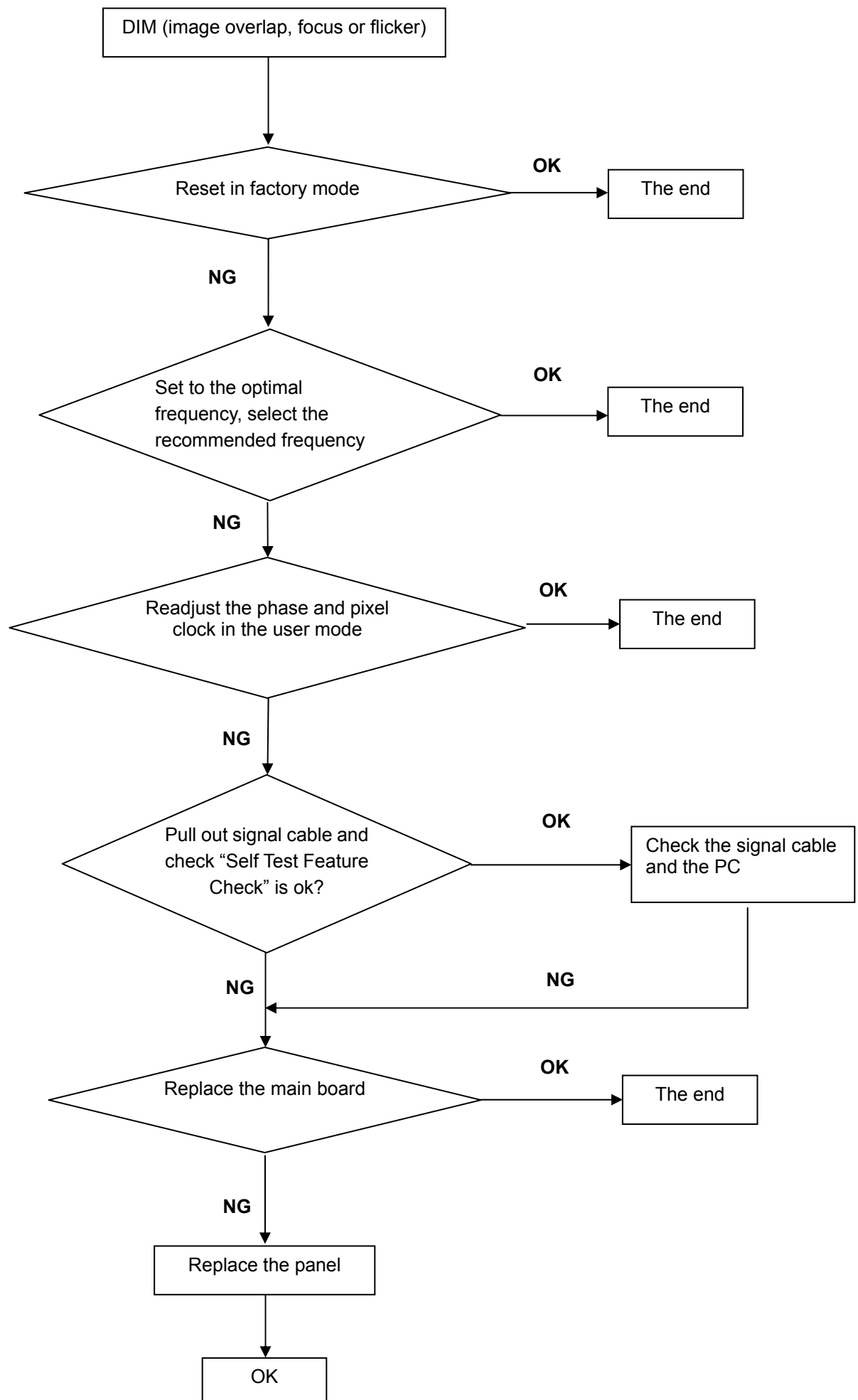
1.No Power



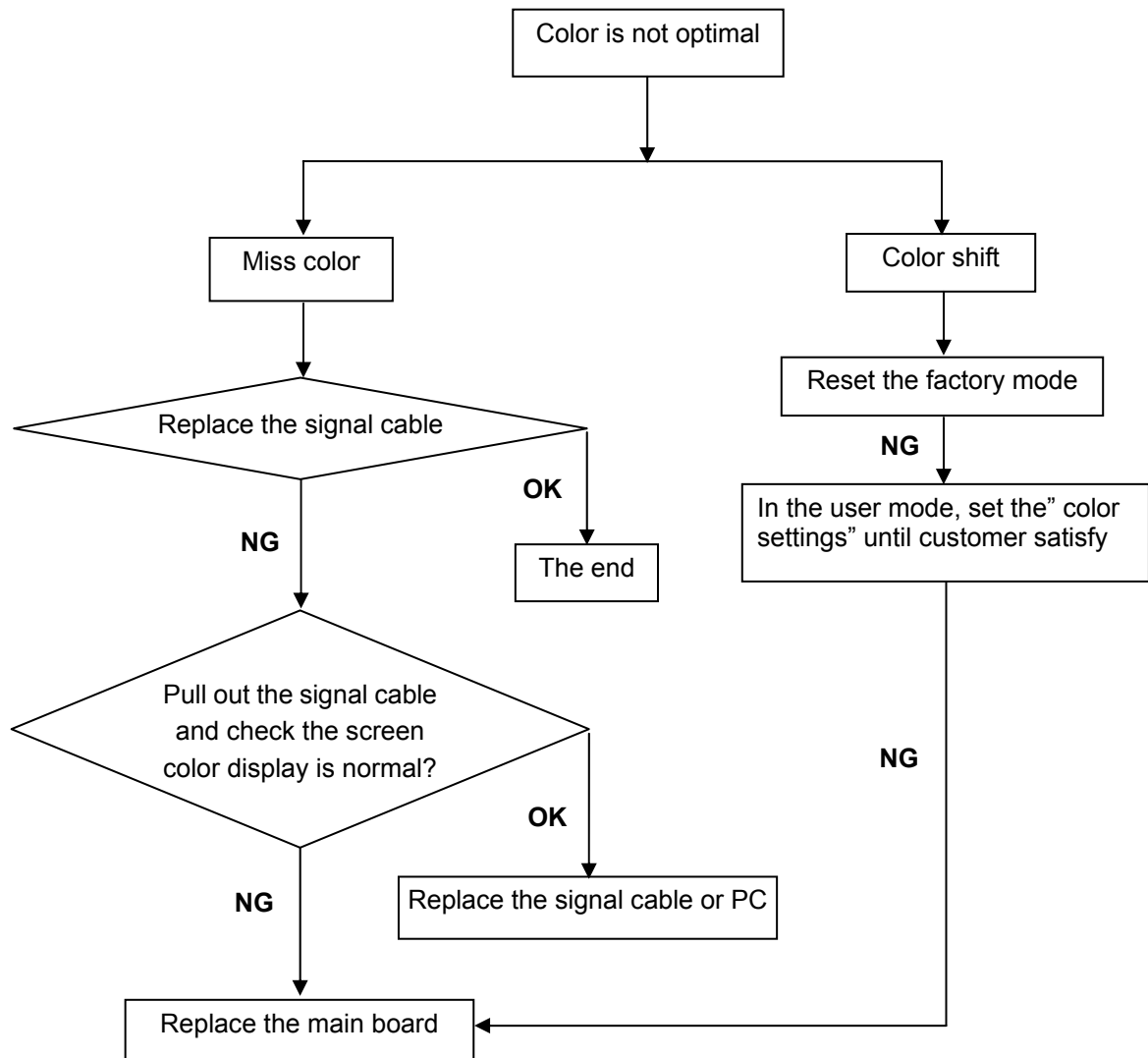
2. No Video (Power LED Blue)



3. DIM



4. Color is not optimal



9. FOS Testing

9.1 Brightness Measurement

Max. Brightness > 250 cd/m² (typ).

Test conditions:

- Center of display
- Video input (RGB) = 0.700V for Analog Input
- Brightness control is set to max
- Contrast control is set to max.


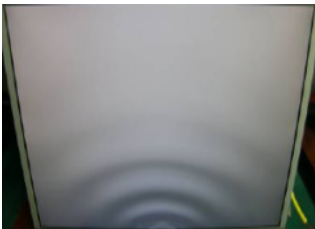




Min. brightness measurement:




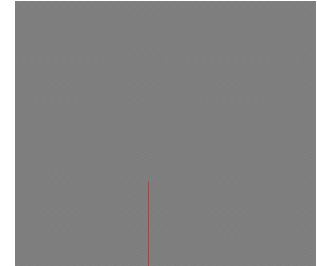

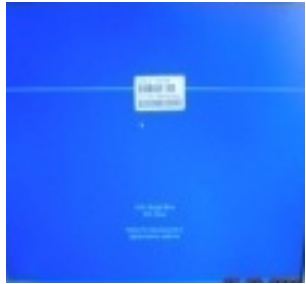

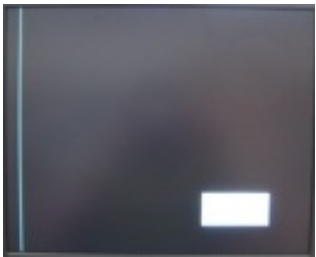
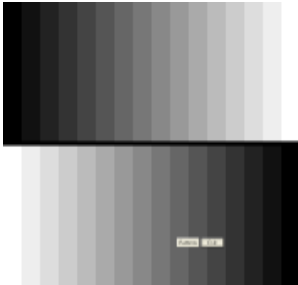

< 45% of Max luminance (max luminance = max contrast + max brightness)




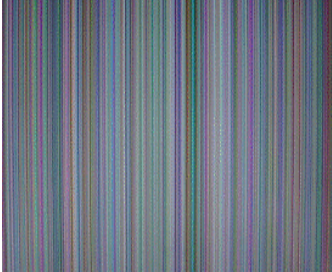
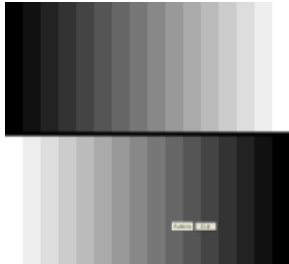

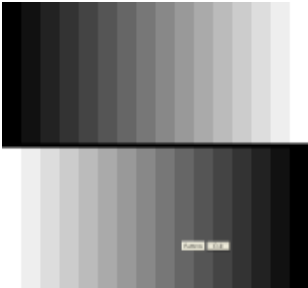
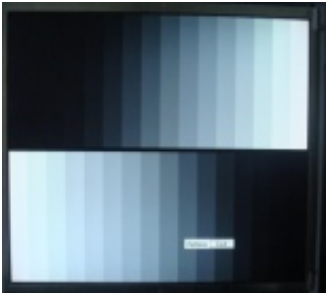
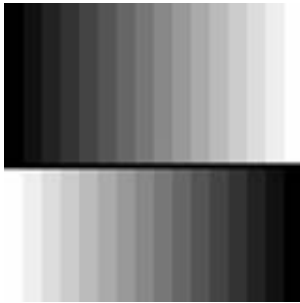
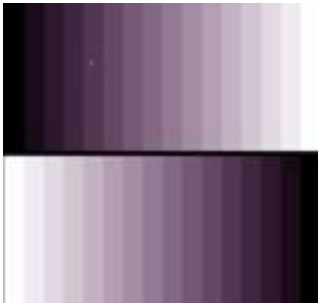
Test conditions: - Center of display





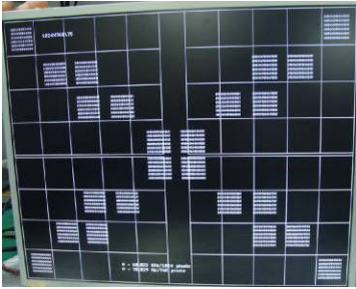

- Video input (RGB) = 0.700V for Analog Input
- Brightness control is set to min.
- Contrast control is set to min.

9.2 Patterns Testing

Item	Condition (Resolution, Commended test pater)	Normal picture	Abnormal Picture
Waterwave noise	1. 1920x1080 (60 Hz) 2. White pattern		
Mura	1. 1920x1080 (60 Hz) 2. Black pattern or White pattern.		
LCD bubble	1. 1920x1080 (60 Hz) 2. Black pattern or White pattern		

Cross line	1. 1920x1080 (60 Hz) 2. Black pattern		
Half line	1. 1920x1080 (60 Hz) 2. Black pattern or White pattern		
H-Line	1. 1920x1080 (60 Hz) 2. Black pattern, Red pattern, Green pattern or Blue pattern.		
V-Line	1. 1920x1080 (60 Hz) 2. Black pattern or White pattern		
H-Strip	1 1920x1080 (60 Hz) 2. Black pattern, Gray scale pattern, Red pattern, Green pattern or blue pattern .		

V-Strip	1. 1920x1080 (60 Hz) 2. Black pattern, Gray scale pattern, Red pattern, Green pattern or blue pattern .		
Abnormal display	1. 1920x1080 (60 Hz) 2. Gray scale pattern		
Gray defect	1. 1920x1080 (60 Hz) 2. Gray scale pattern		
Video noise	1. 1920x1080 (60 Hz) 2. Gray scale pattern		
Color tint	1. 1920x1080 (60 Hz) 2. Gray scale pattern		

Gray scale failure	1. 1920x1080 (60 Hz) 2. Gray scale pattern		
Light leakage	1. 1920x1080 (60 Hz) 2. Black pattern or White pattern		
Fuzzy video	1. 1920x1080 (60 Hz) 2. Pane picture		

10.Firmware and DDC Instruction

10.1Firmware Instruction(TSUM IC ISP for exemple NT68676)

Step 1: OPERATION CONDITIONS:

- 1) An i486 (or above) personal computer or compatible.
- 2) Microsoft operation system Windows 95/98/2000/XP.
- 3) ISPTool programs programs.
- 4) Printer cable and VGA cable.
- 5) ISP board (PN: 715GT034-B, 715GT048-1 or715GT035-A).
- 6) ISP Firmware/Software

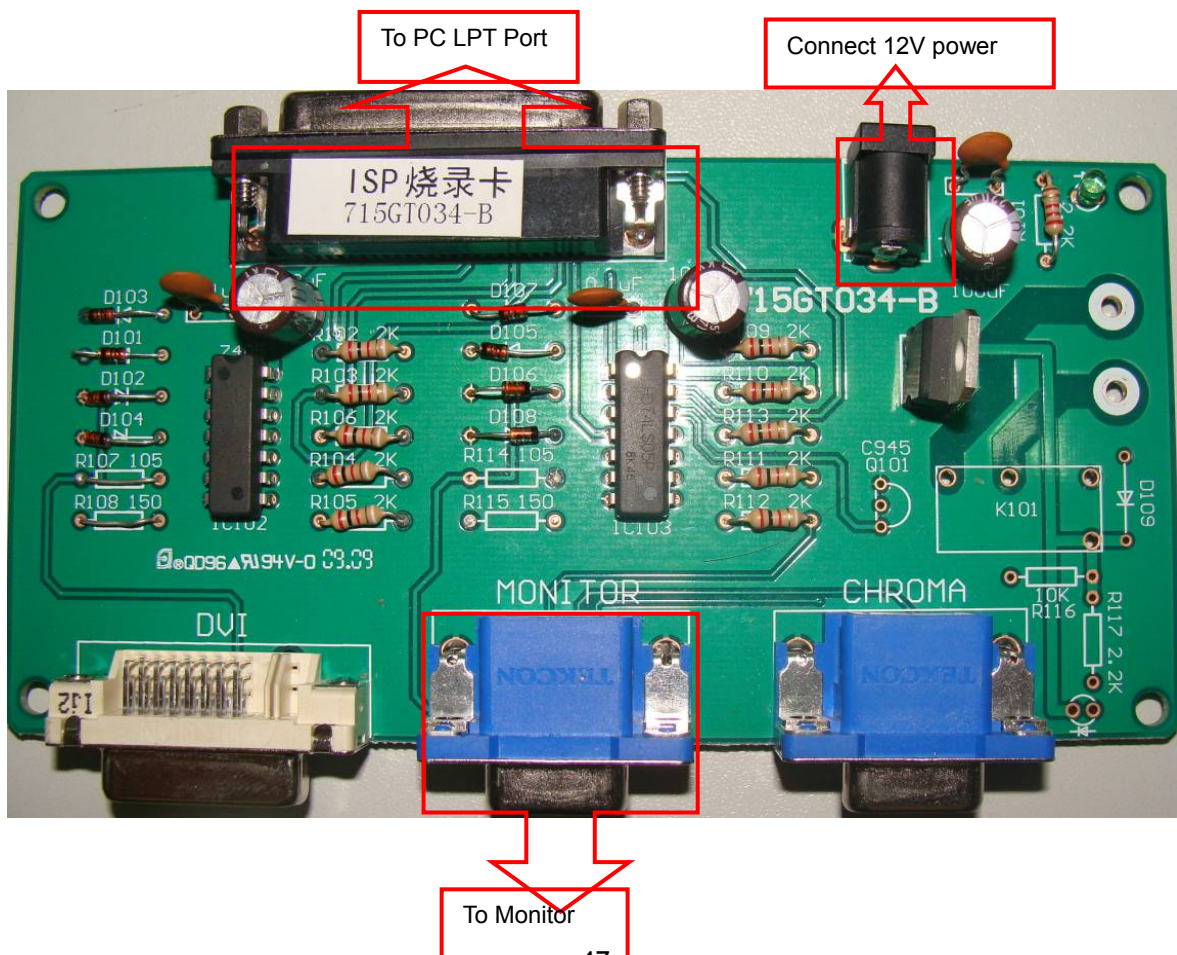
Step 2: Connection:

- 1) LPT cable connect PC and ISP board ;
- 2) VGA cable connect monitor and ISP board ;
- 3) Reference picture as below

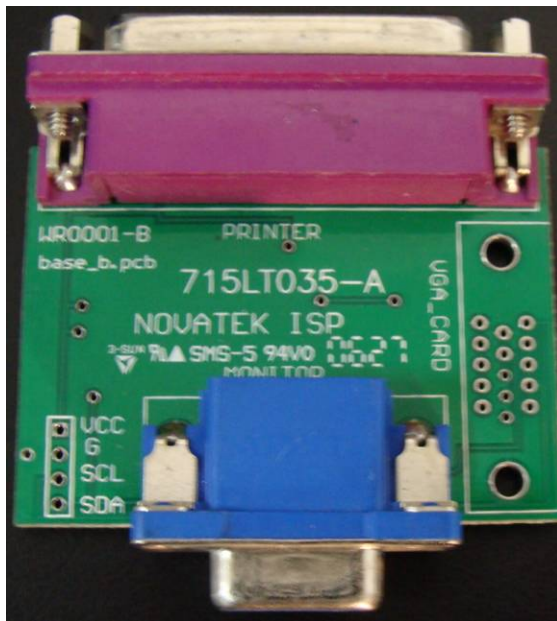
NO1. TPV Part No. : 715GT048-1 or 715GT035-A (715GT048-1 or 715GT035-A)



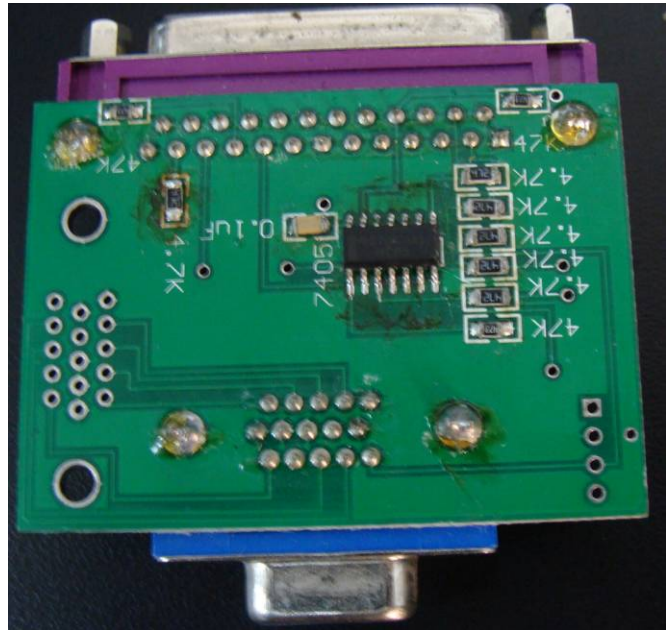
NO2. TPV Part No : 715GT034-B (NEW LCD EDID TOOL : 715GT034-B)



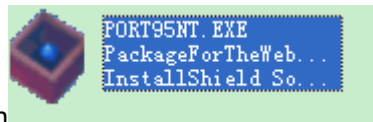
ISP TOOL front side



ISP TOOL reverse side



Step 3: Programming:



1. Double-click the icon to install Port95nt print driver,

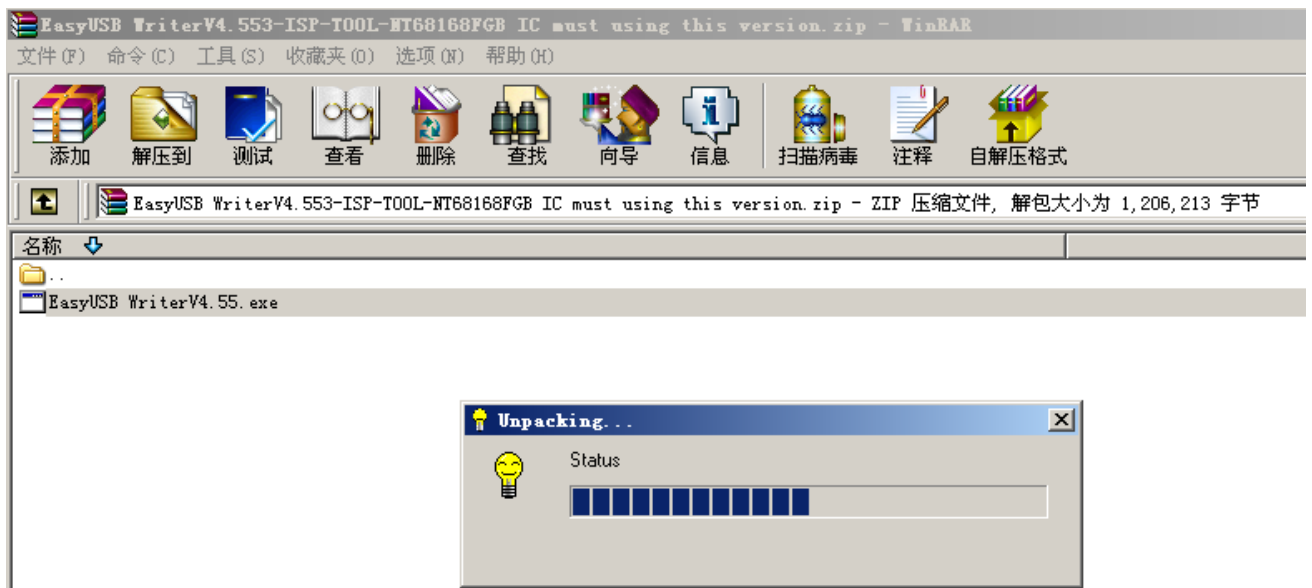
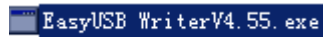
2. Install tool programme



2.1 decompress

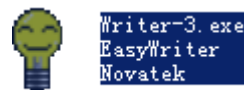
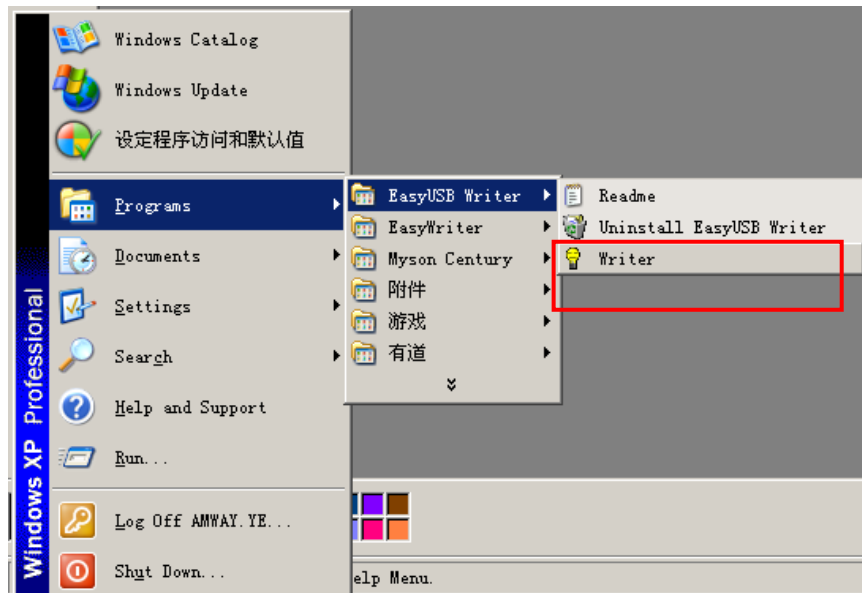
PS:NT68168F Scale IC must use V4.566 version.

2.2 Double-click



3. ISP Tool

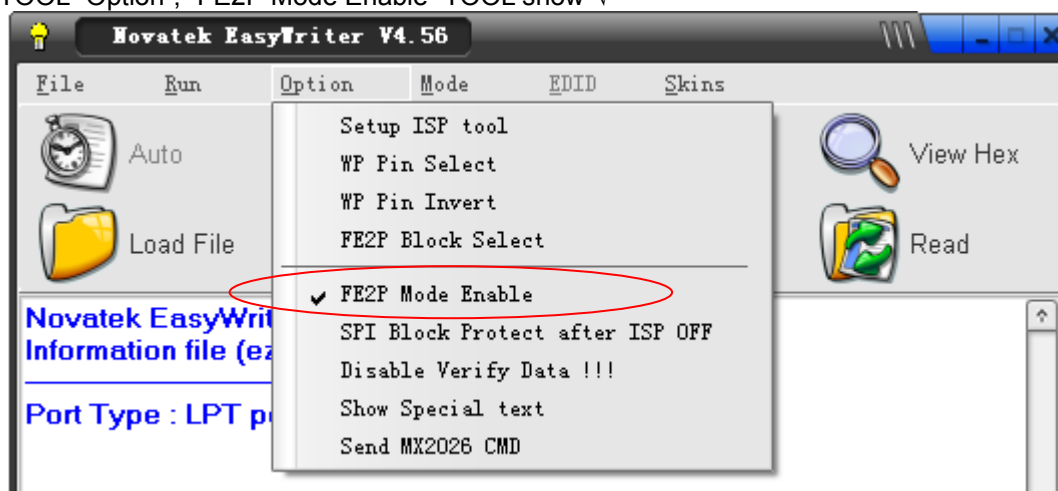
3.1. Choose "writer" as follow picture.



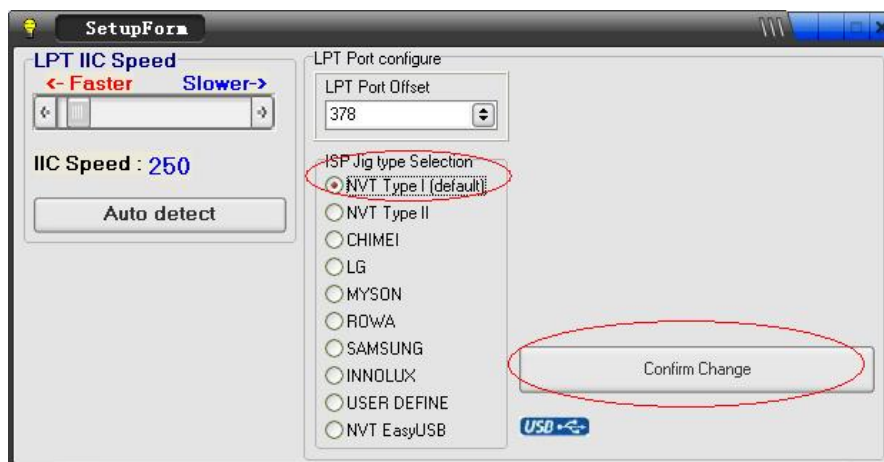
3.2. Double-click icon and run it:



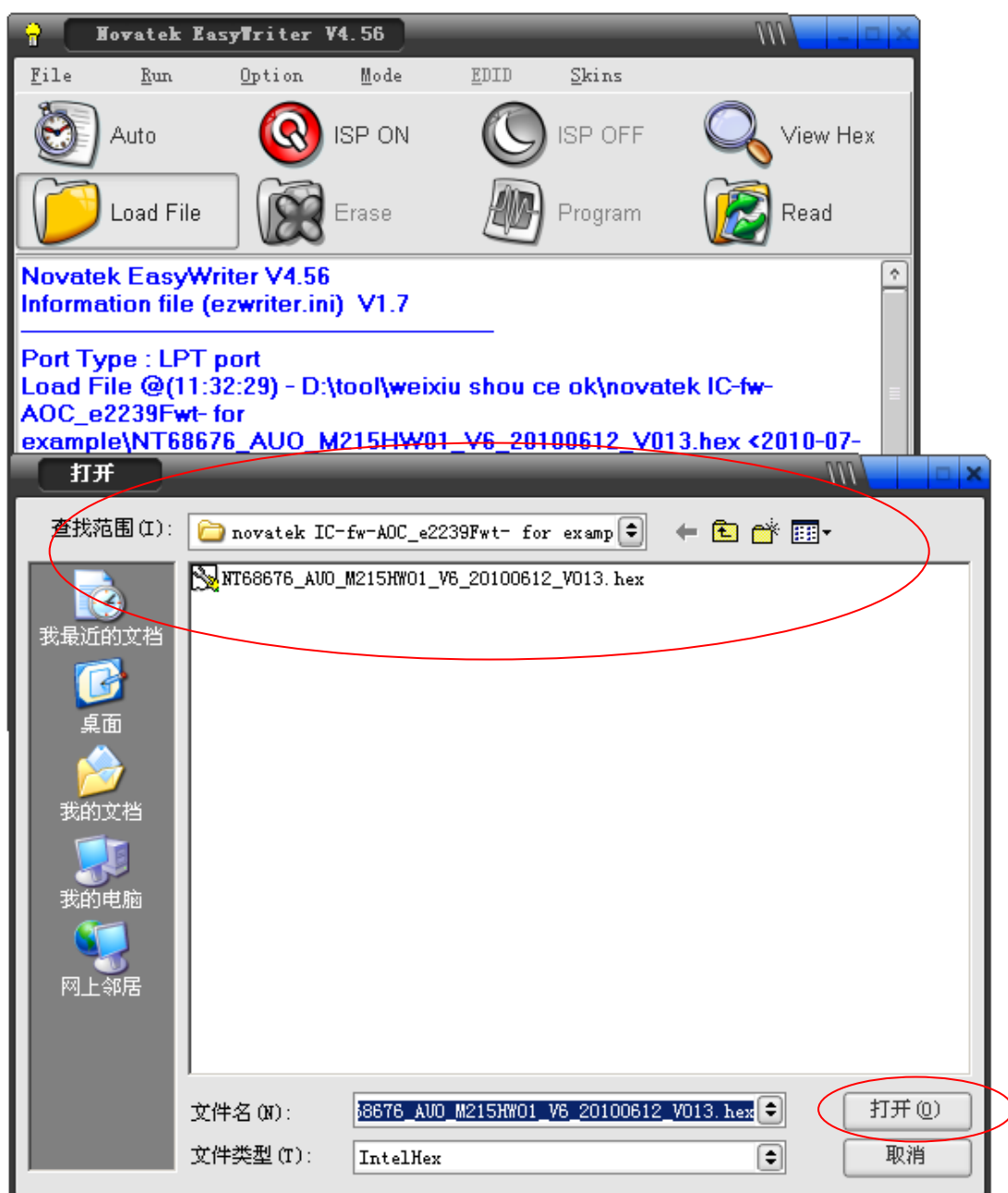
4. Click TOOL "Option", "FE2P Mode Enable" TOOL show "✓"



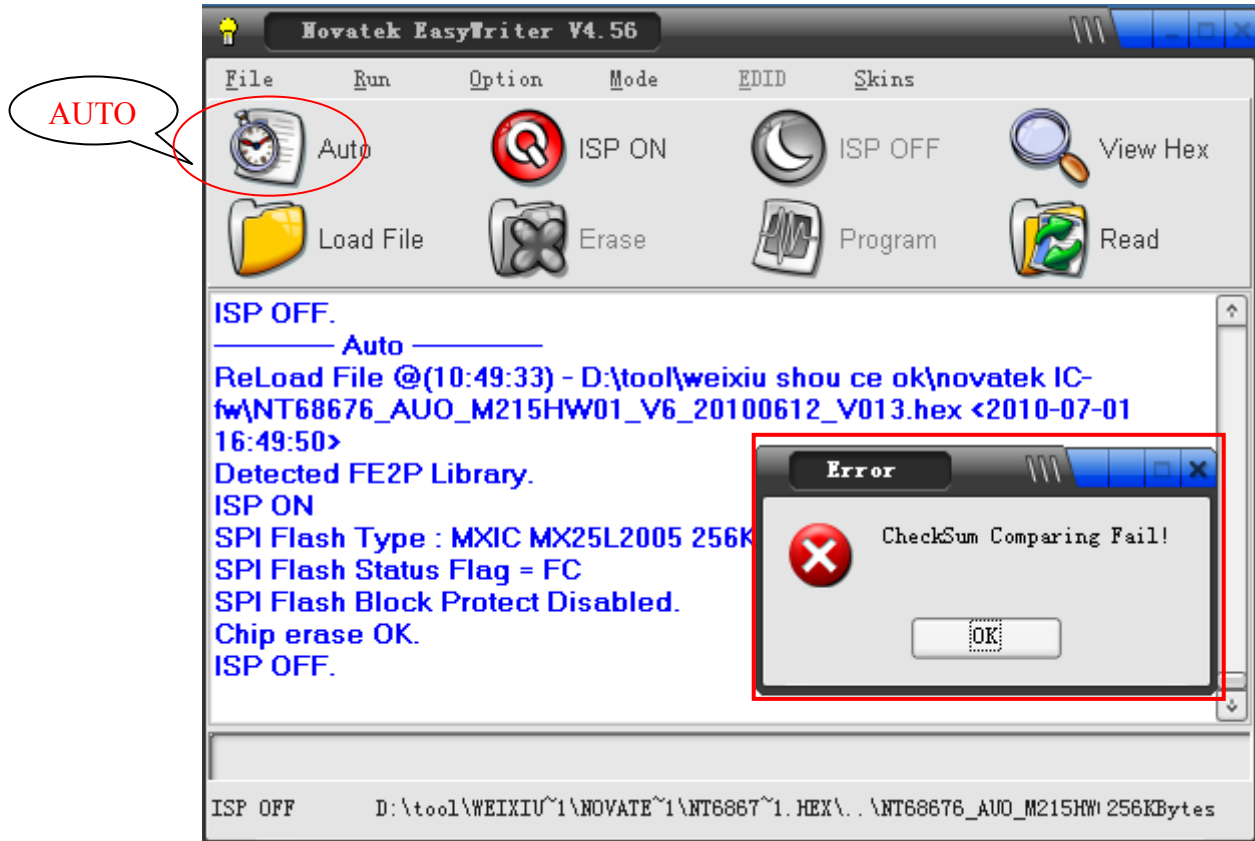
5. Click tool "Option" choose "Setup ISP tool" and then choose LPT Port, the next, choose NVT Type (default), click "Auto Detect" to choose the appropriate speed. Click "Confirm change".



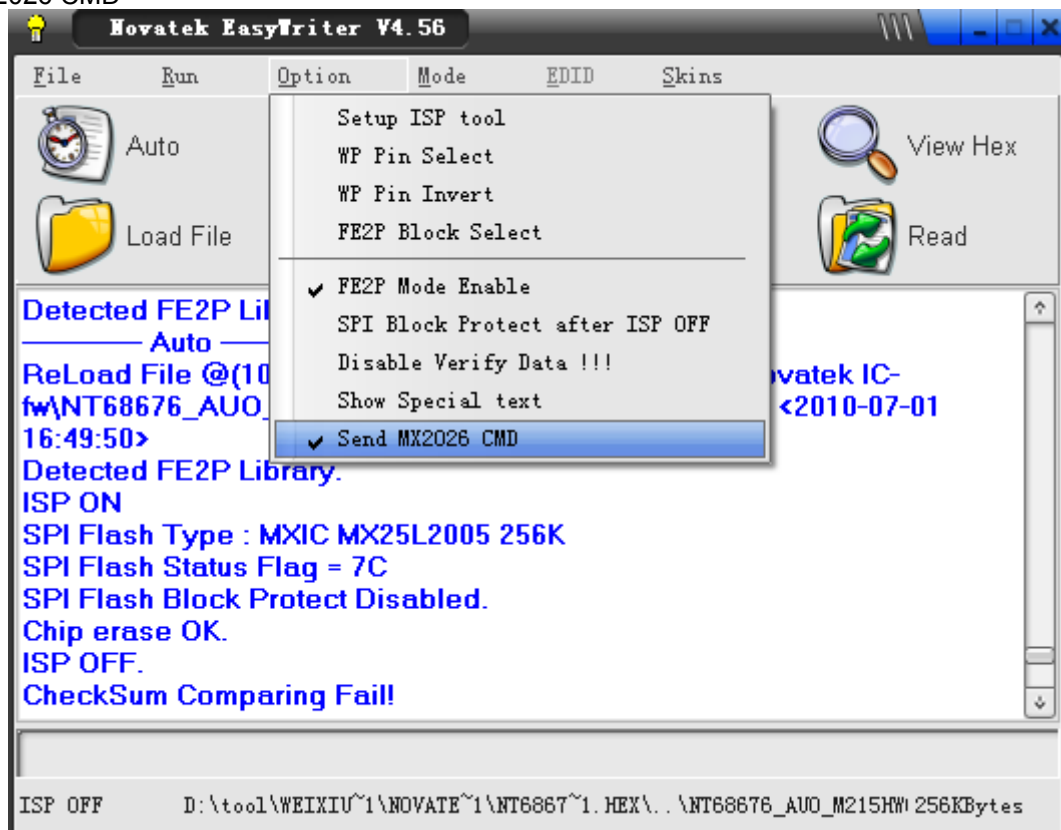
6. Click "Load File" to use the proper software:



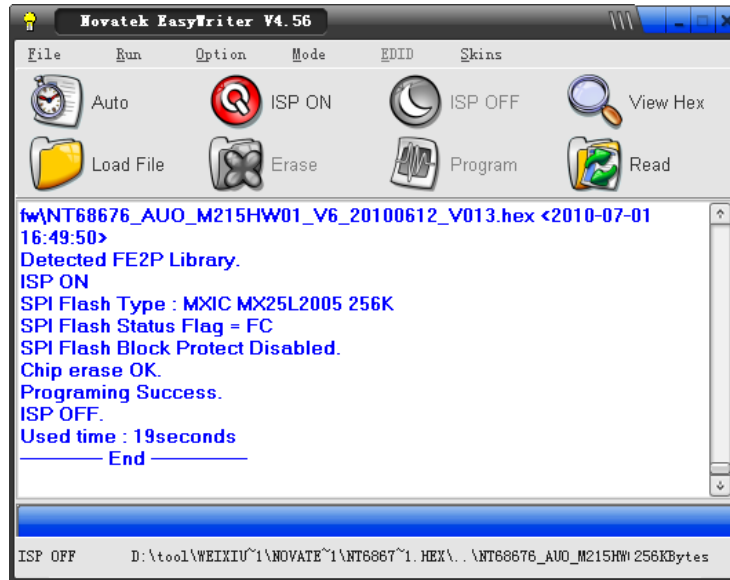
Click "Auto"



Click "Send MX2026 CMD"



Click "AUTO" , when appear "pass" as follow picture that burning is successful:



Note: After installation, you must restart the PC to take the setup to effect.

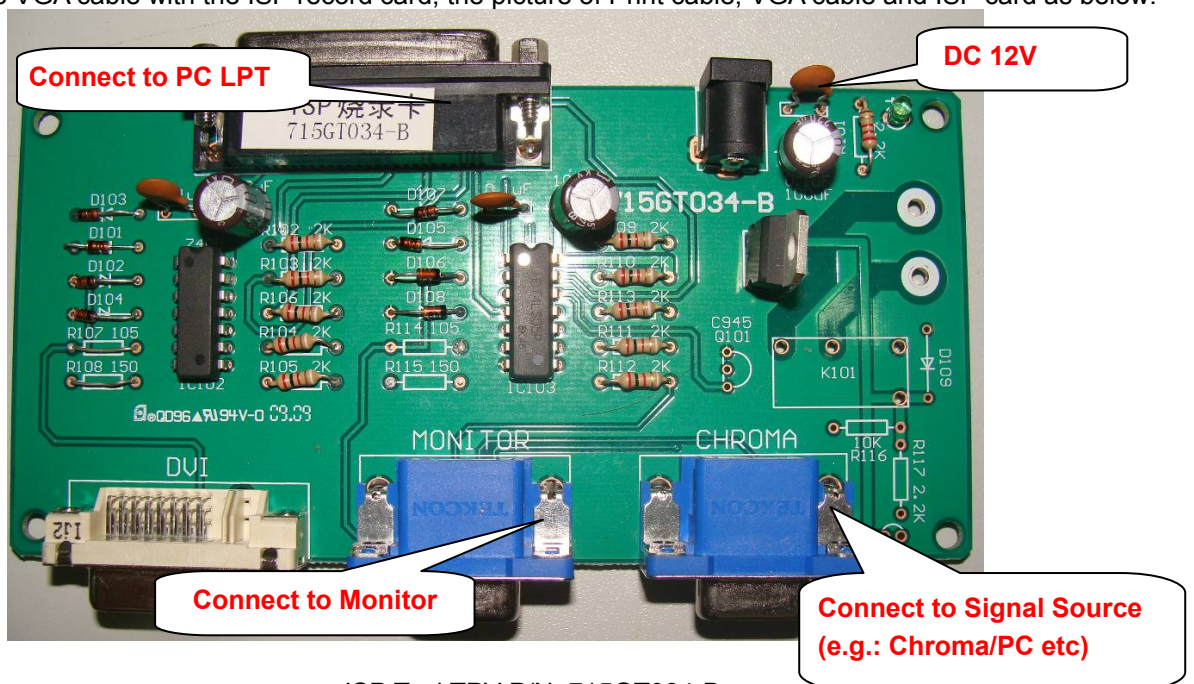
Step4: Check whether the FW version is correct, then do “Auto Color” and “Reset”.

- For VGA, if can't use the recommended optimal resolution; for DVI, if no video with PC source, while picture is normal with chroma source, it's the reason for “DDC Loss”, so pls do DDC programming.
- When the monitor connects the DVD or other play devices with DVI->HDMI cable, and play the HD video with copyright, while the low-resolution, snowflake point or no video with normal audio; But picture is normal with PC source, pls programming the “HDCP code” or replace the new main board. (Pls refer to the “HDCP code” programming as below)

Step5: HDCP Write SOP

I. Prepare condition:

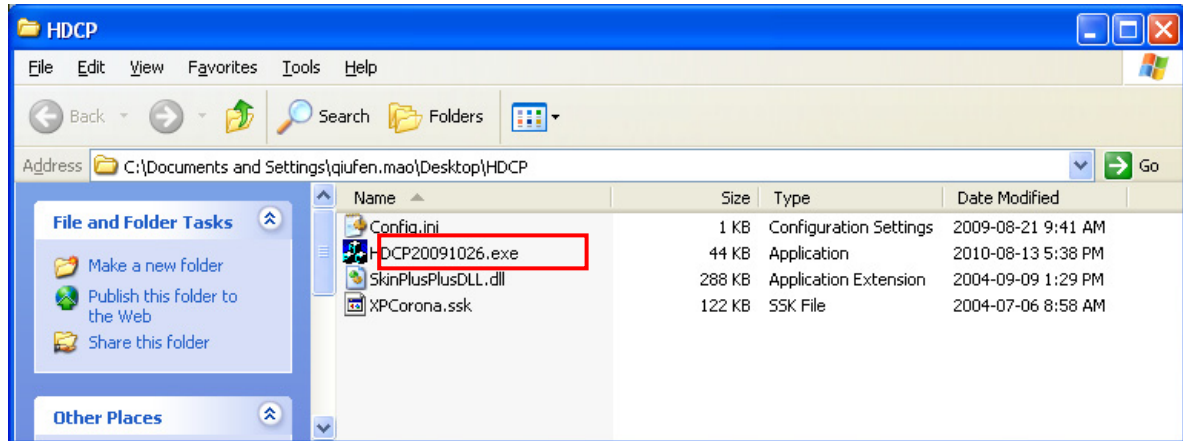
- Prepare one PC and the system is WIN98/NT/2000/XP, make sure the PC have Print Port.
- Install Port95nt Software, the way of the install Port95 (LPT PORT drive):
 - selects the software of Port95nt.exe, and run it,
 - After install ok, restart the PC.
- Connect the cable and Jig:
 - Use the Print cable to connect the PC and HDCP card.
 - Connect the VGA cable with the ISP record card, the picture of Print cable, VGA cable and ISP card as below:



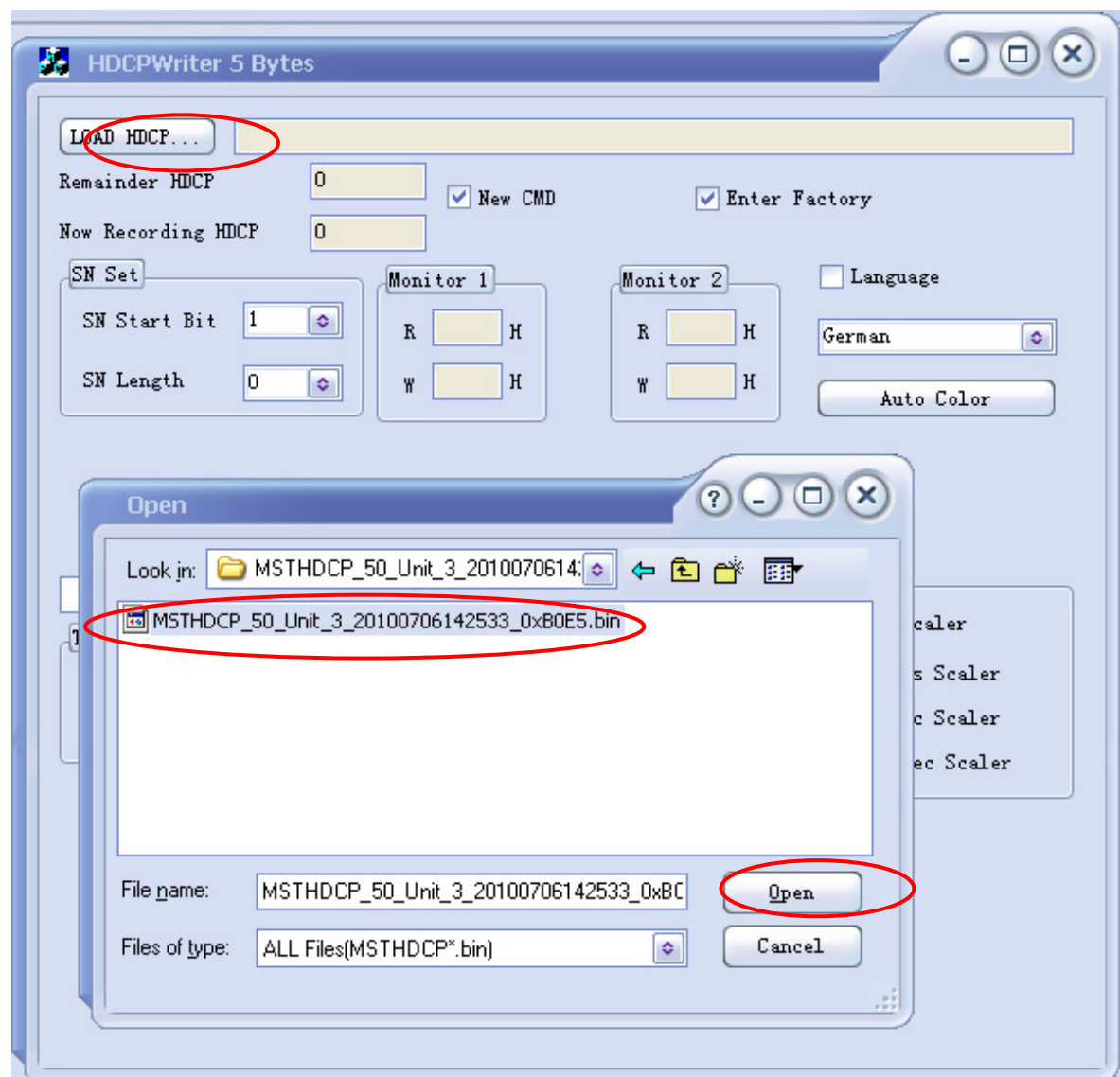
ISP Tool TPV P/N: 715GT034-B

II. HDCP Write Step:

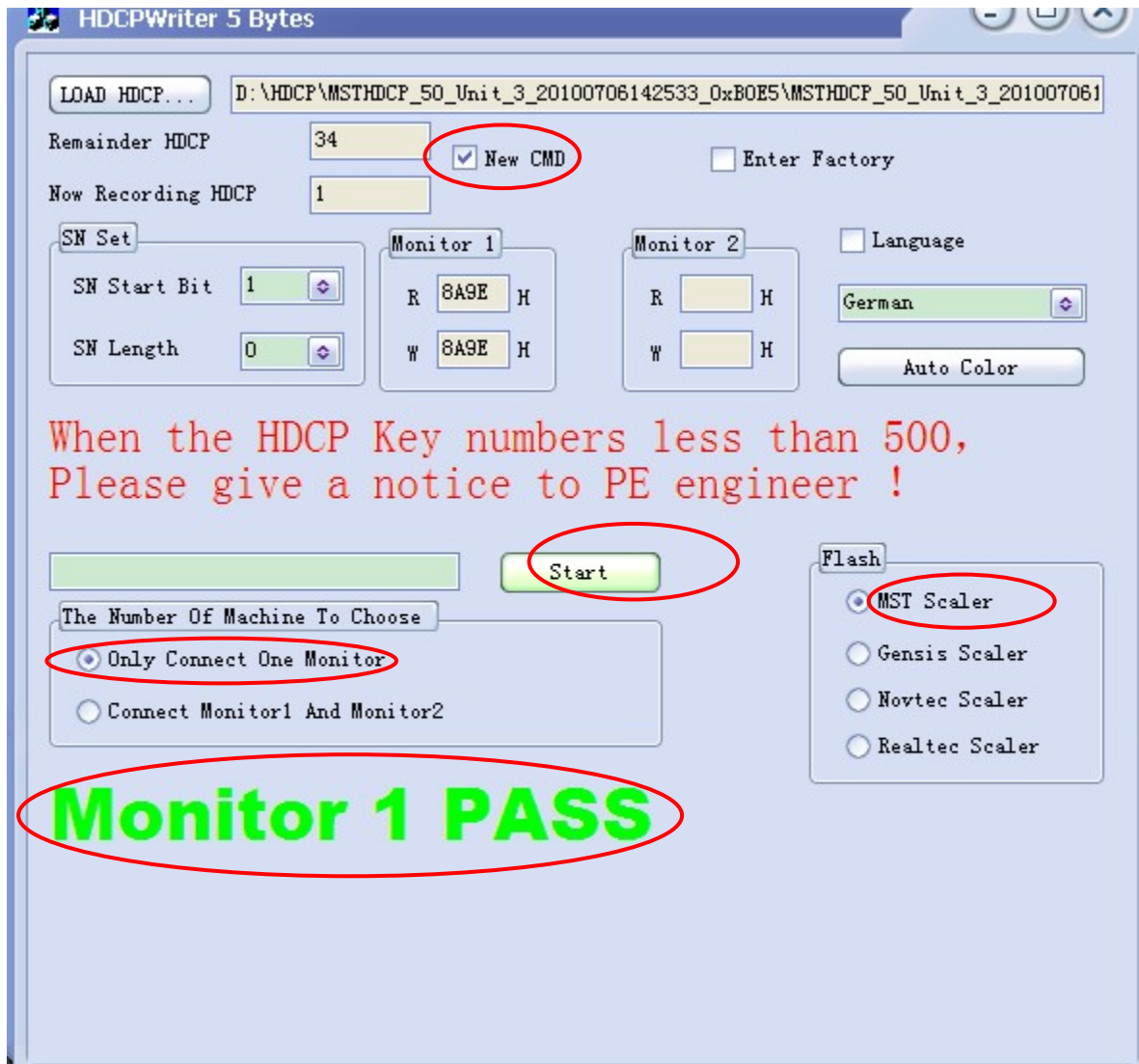
Step1. Double click "HDCP20091026.exe"



Step2. Click "Load HDCP...". choose the corresponding "*.BIN" by scaler IC (MST Scaler), then click "Open" as below.



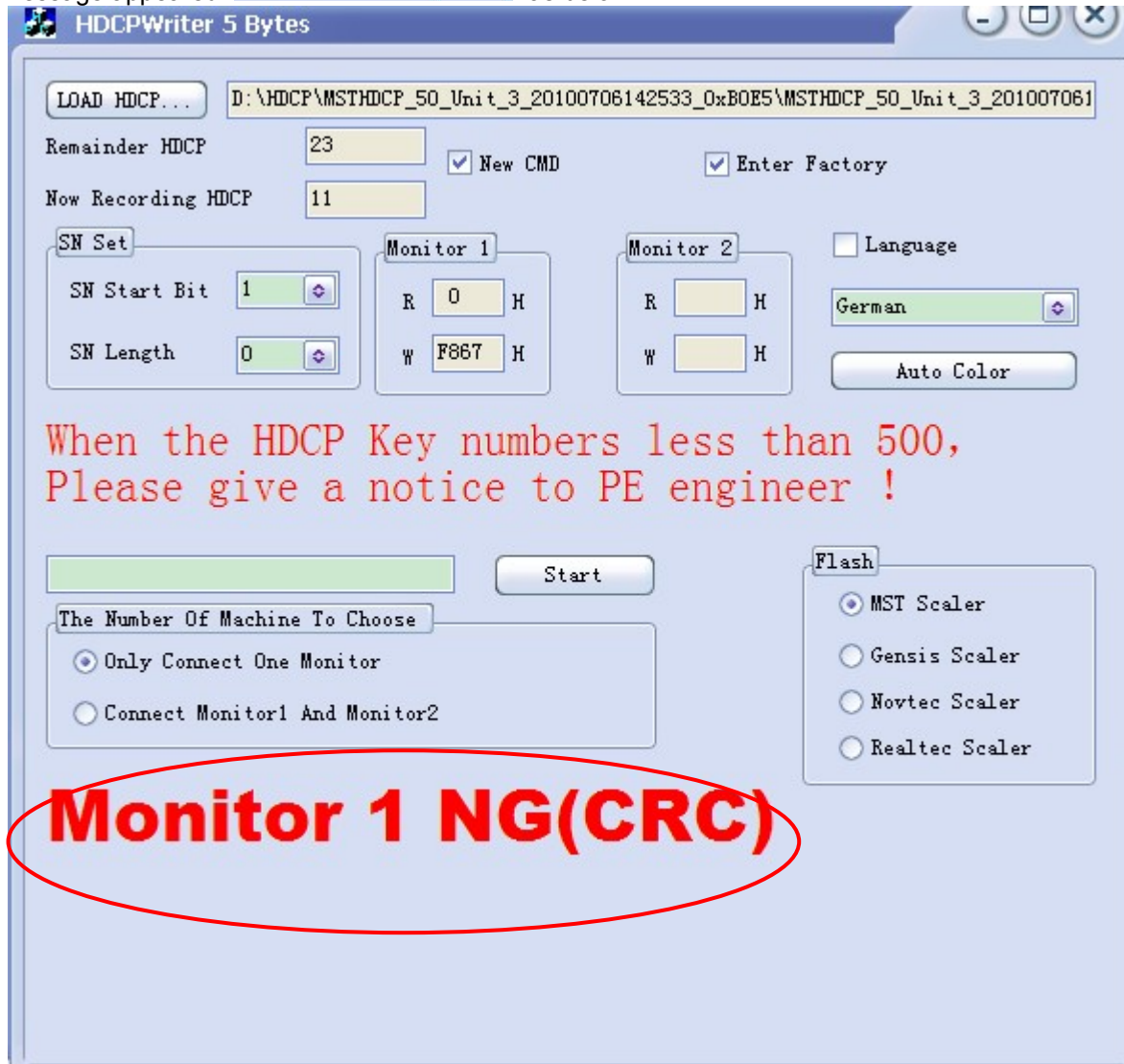
Step3. Pls choose the item remarked in red (i.e.: New CMD/Only Connect One Monitor/MST Scaler), then click "Start" to write HDCP, when display "Monitor 1 PASS" means Write OK.



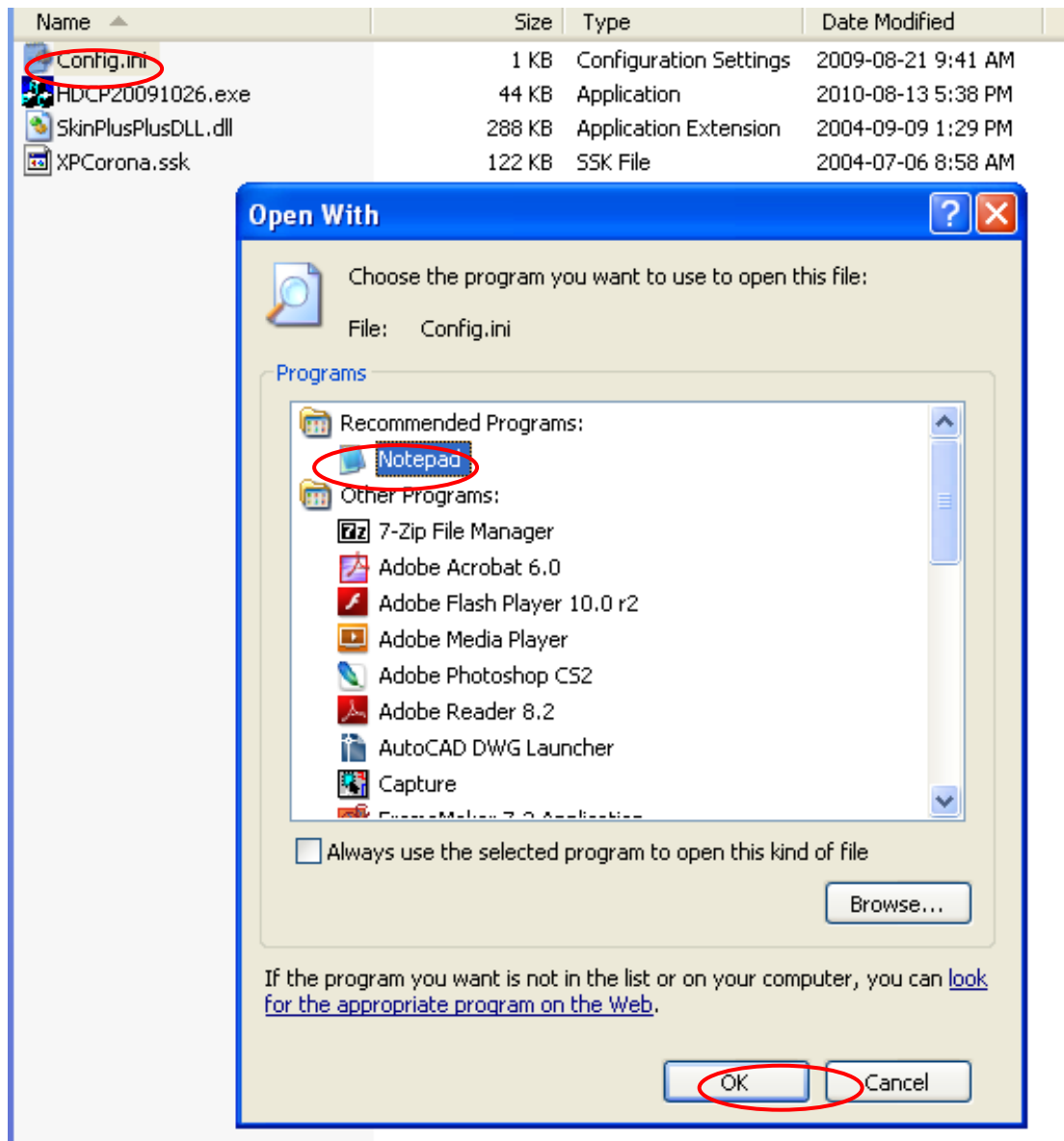
III. Check HDCP.

USE "Blu-Ray Disc" DVD to check whether the monitor with DVI connector displays normally.

If error message appeared "**Monitor 1 NG(CRC)**" as below:



1. Check whether the HDCP writer is correct.
2. Check whether the tool is correct or not, and check the connection between PC, Monitor and tool. In addition, check whether the tool's power supply is available.
3. If still no work, pls modify the "config.ini" as below, and then try again.
Modify Step: Right click "config.ini"-> Open with "Notepad"->"OK"-> Modify the HDCP value (350->500, 150->300, 500->700)->Save.
PS: You can also open "config.ini" directly if you have opened it through "Open with 'Notepad' " before.



Config.ini - Notepad

File Edit Format View Help

```
[Cmd]
    cmd_Class=1

[Language]
    writeLanguageFlag=0
    LanguageType=German
    SelectLanguageDelay=300

[Auto]
    EnterFactoryFlag=1
    EnterFactoryDelay=200

    AutoFlag=0
    AutoDelay=1000

[HDCP]
    SendHDCPLengthDelay=350
    SendHDCPDataDelay=150
    CheckHDCPCRCDelay=500
    DatatocrcDelay=200
    m_SelectScaler=0
```

350 ->500
150 ->300
500 ->700

Config.ini - Notepad

File Edit Format View Help

```
[Cmd]
    cmd_Class=1

[Language]
    writeLanguageFlag=0
    LanguageType=German
    SelectLanguageDelay=300

[Auto]
    EnterFactoryFlag=1
    EnterFactoryDelay=200

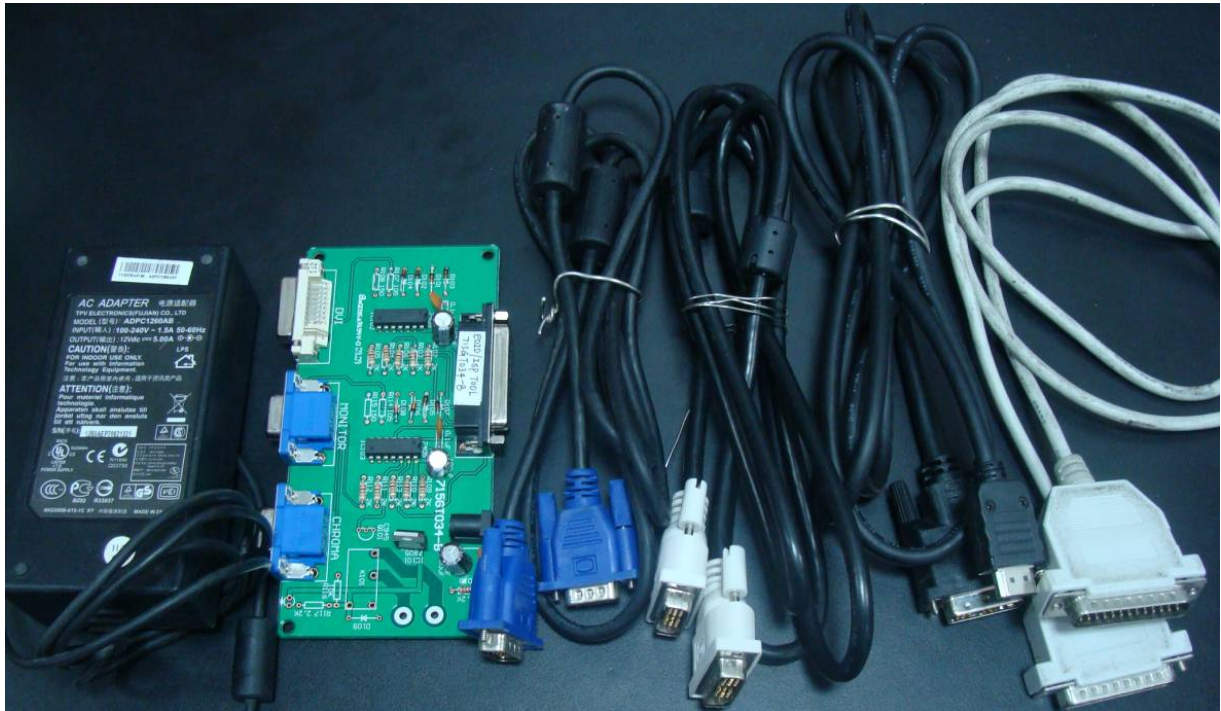
    AutoFlag=0
    AutoDelay=1000

[HDCP]
    SendHDCPLengthDelay=500
    SendHDCPDataDelay=300
    CheckHDCPCRCDelay=700
    DatatocrcDelay=200
    m_SelectScaler=0
```

10.2 DDC Instruction

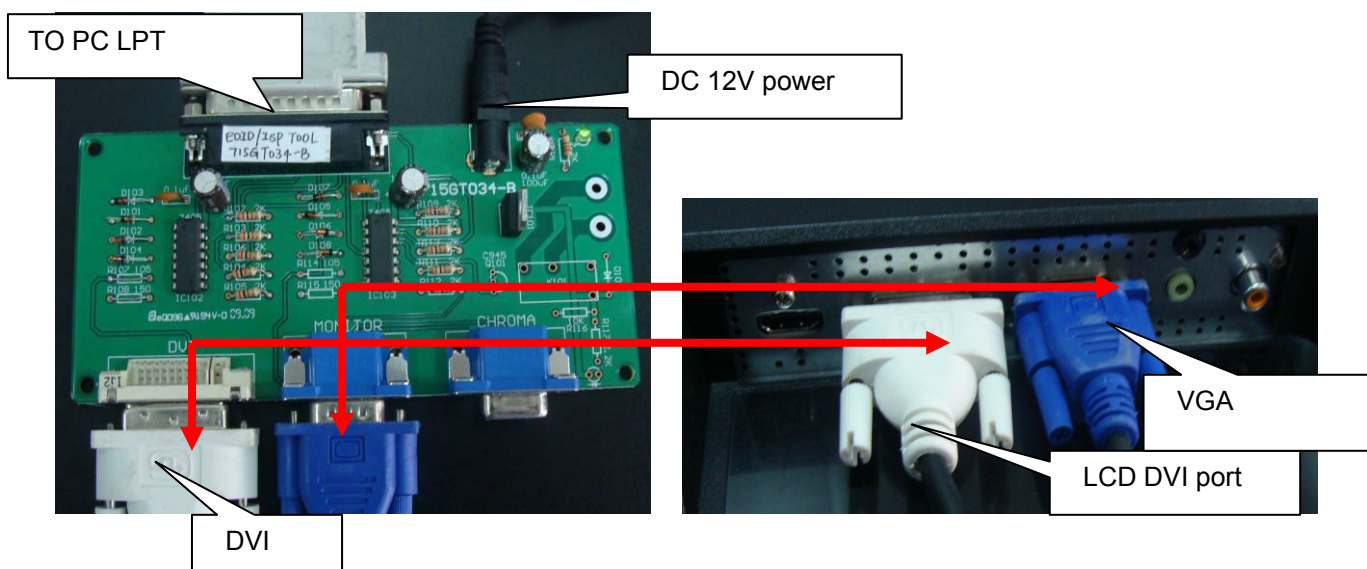
Tool list:

1. DDC board:715GT034-B
2. Software (WA.DAT&WD.DAT&*. CONFIG.INI)
3. LPT driver software
4. LPT cable, D-SUB CABLE ,DVI CABLE and DVI to HDMI CABLE
5. 12V(Adapter)
6. TPVDDCHDMI and TPVDDC6.0
7. PC



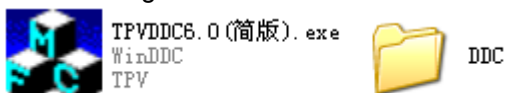
Tool picture

For VGA&DVI BURNING: DDC Board as the follow picture:



Install software:

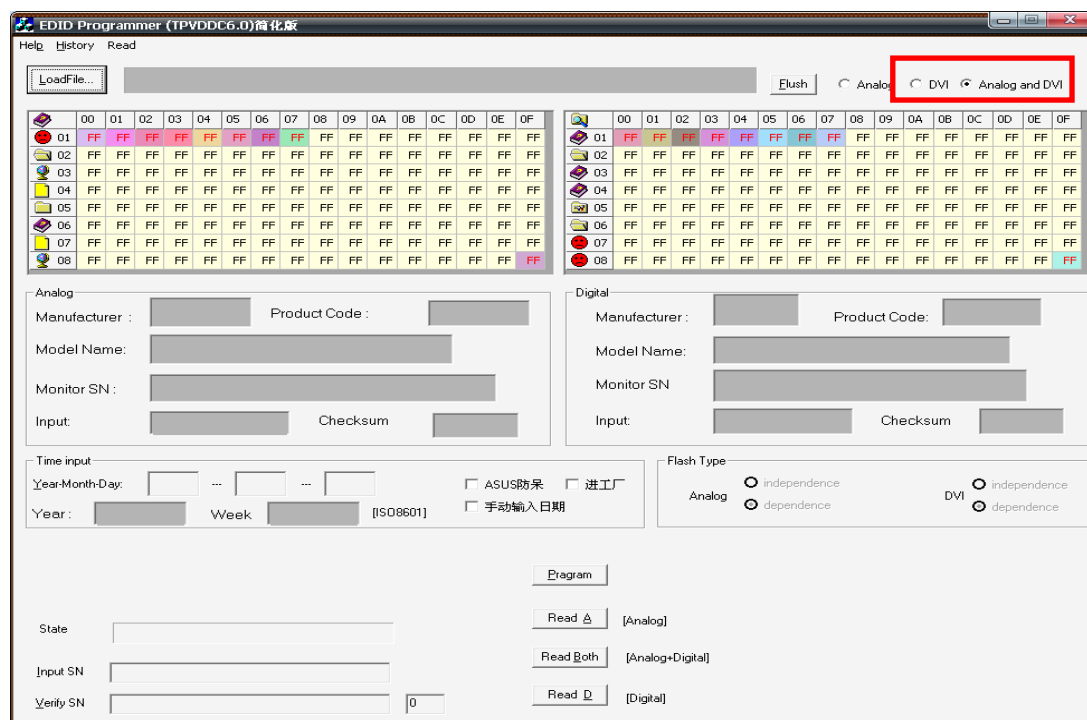
Note: Burning software and EDID data must be put in the same folder as follow picture:



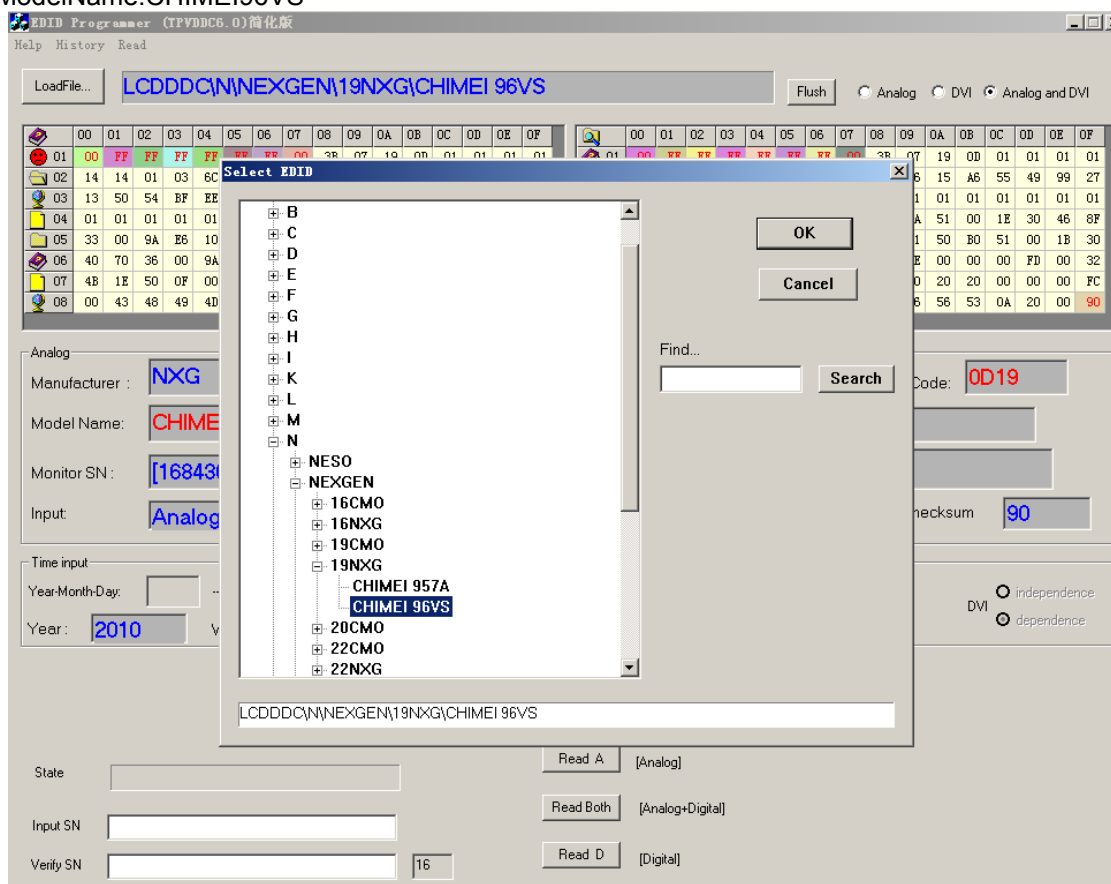
VGA&DVI Burning:

1. Double-click the icon “” to install Port95nt print driver, and then restart the computer.

Double-click  , select “Analog and DVI” show as follow picture



2. Click “Load file” and select as follow picture. then click “LCDDDC”
EX: DDCModelName:CHIMEI96VS

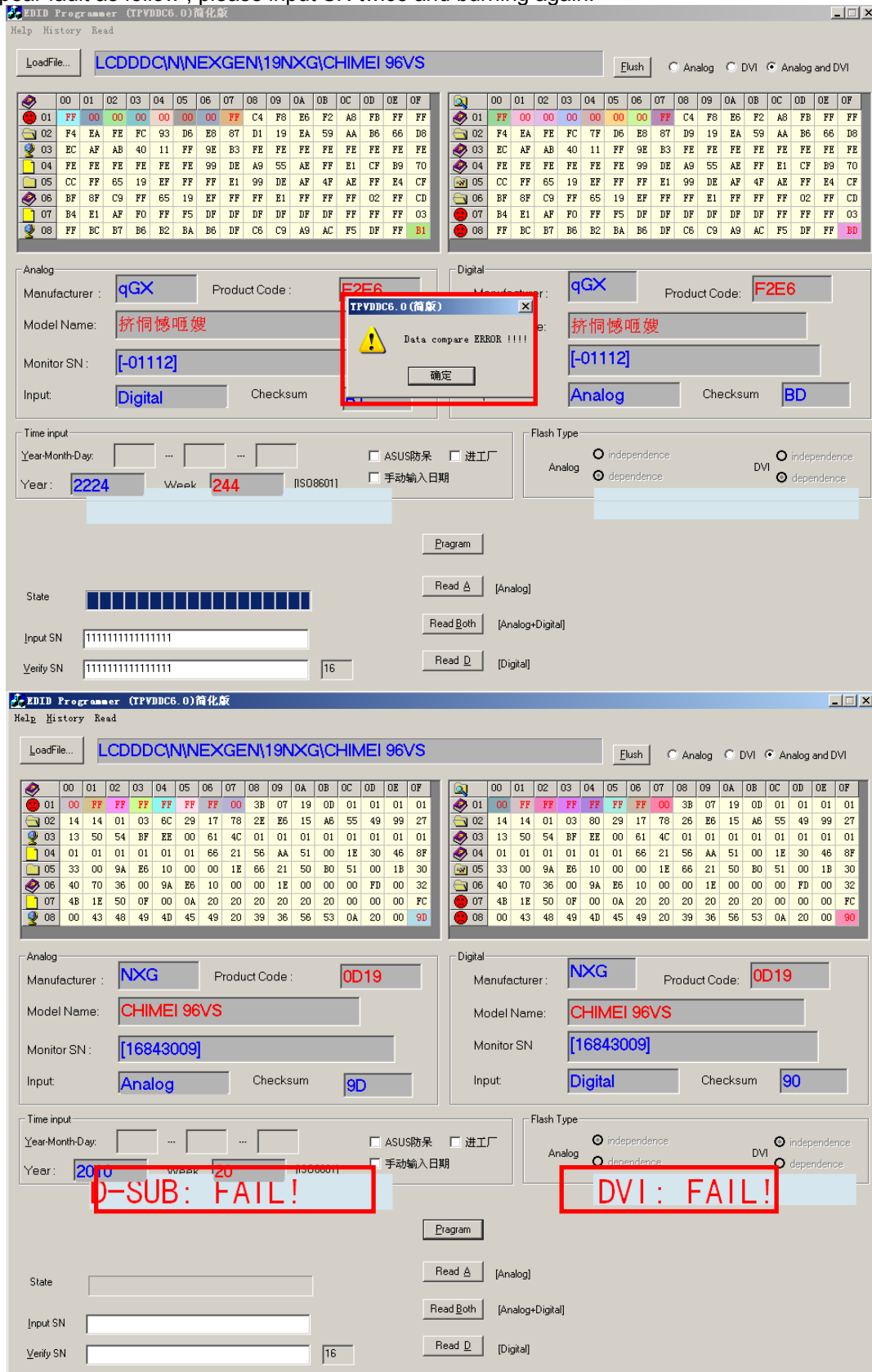


3. Click “ok” show as follow picture.

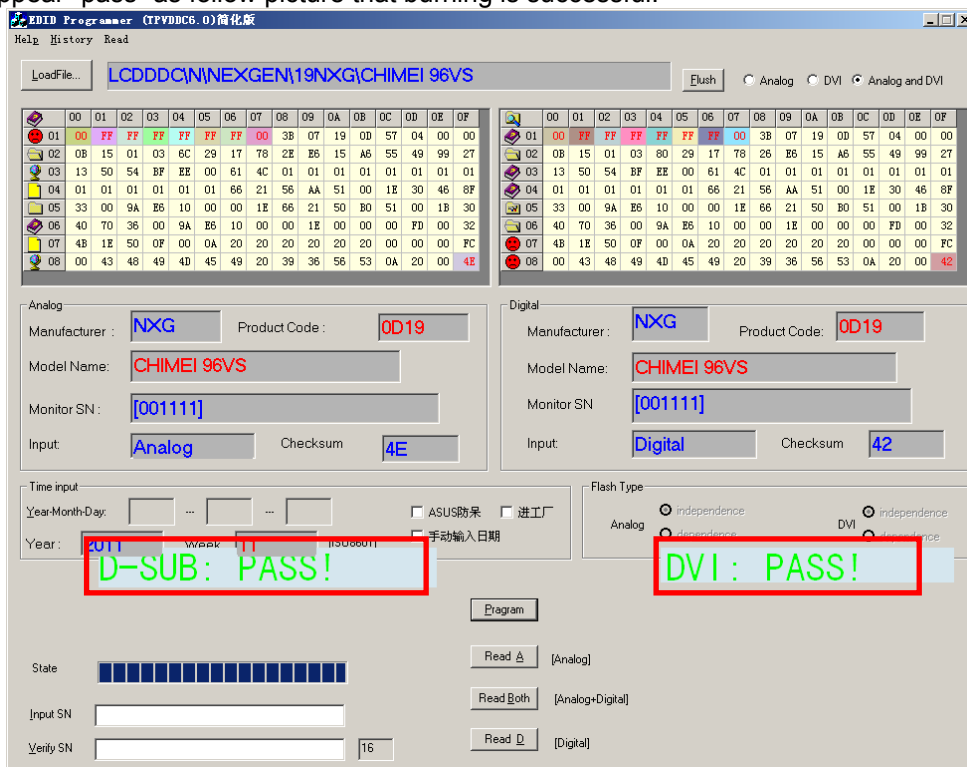
4. Input same SN twice and date. Click “Program” to burn. When appear “pass” as follow picture that burning is successful.

5. Click “program”,

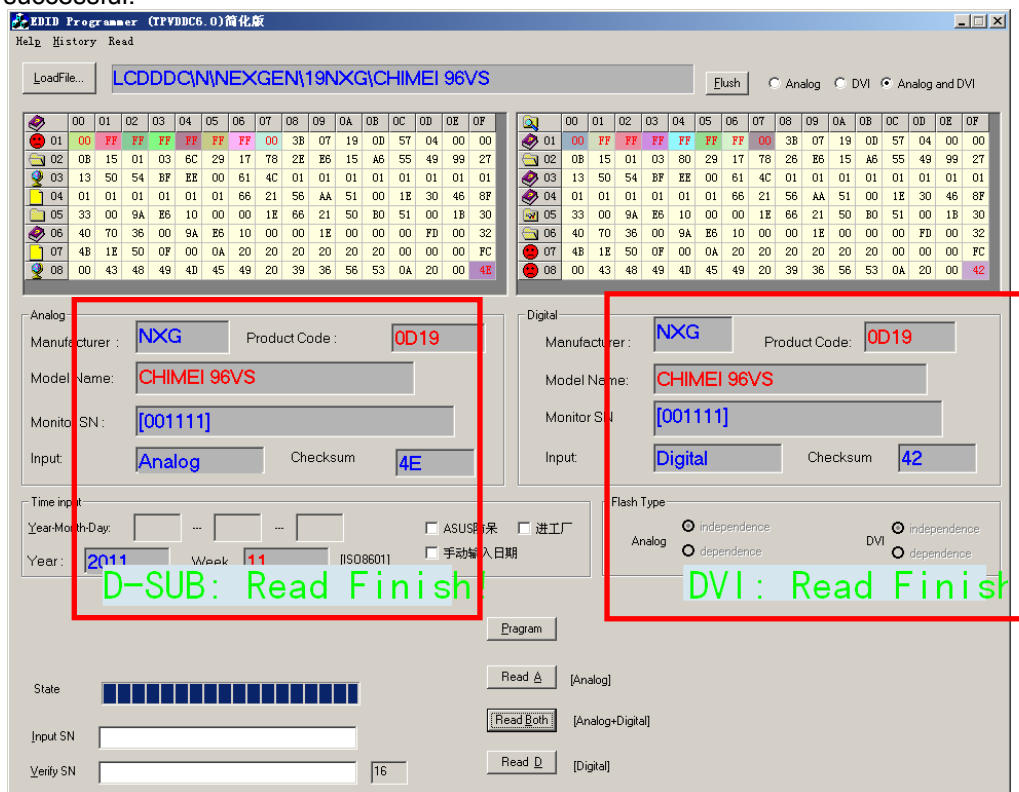
Note:1. Appear fault as follow , please input SN twice and burning again.



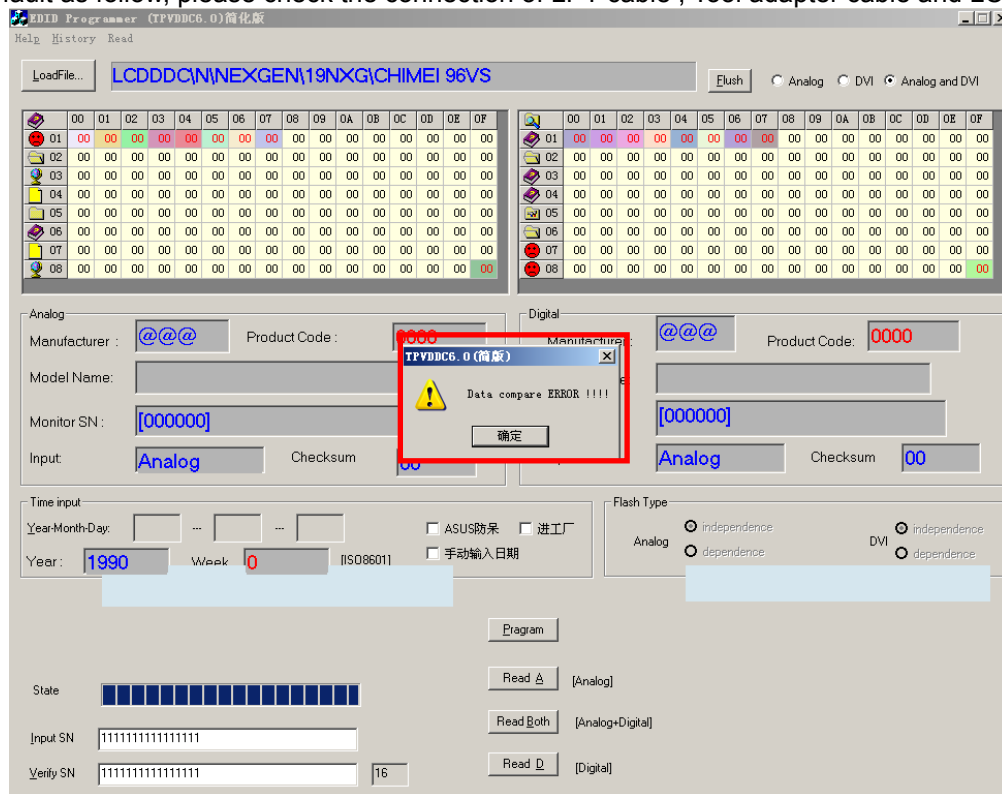
Note:2. When appear “pass” as follow picture that burning is successful.



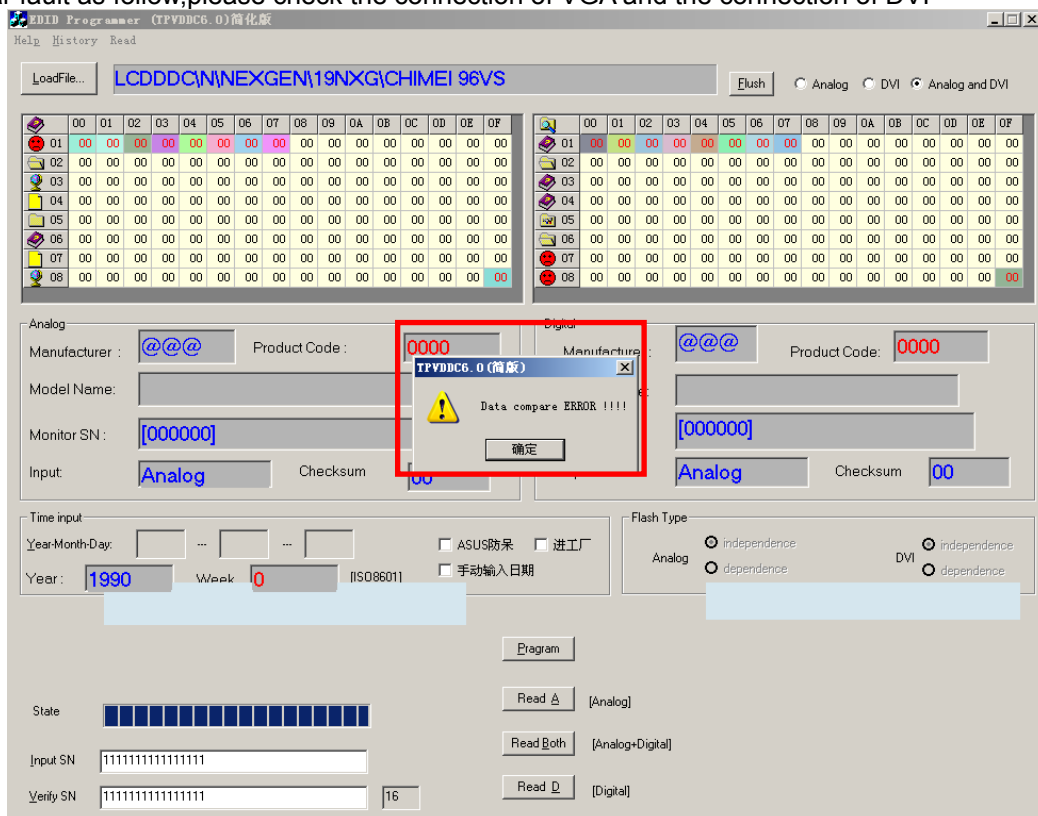
Note3:Click “Read both” show as follow picture..If read SN and model name are same as before inputing as before that burning is successful.



Note4: Appear fault as follow, please check the connection of LPT cable , Tool adapter cable and LCD power.



Note5: Appear fault as follow, please check the connection of VGA and the connection of DVI



Note6:

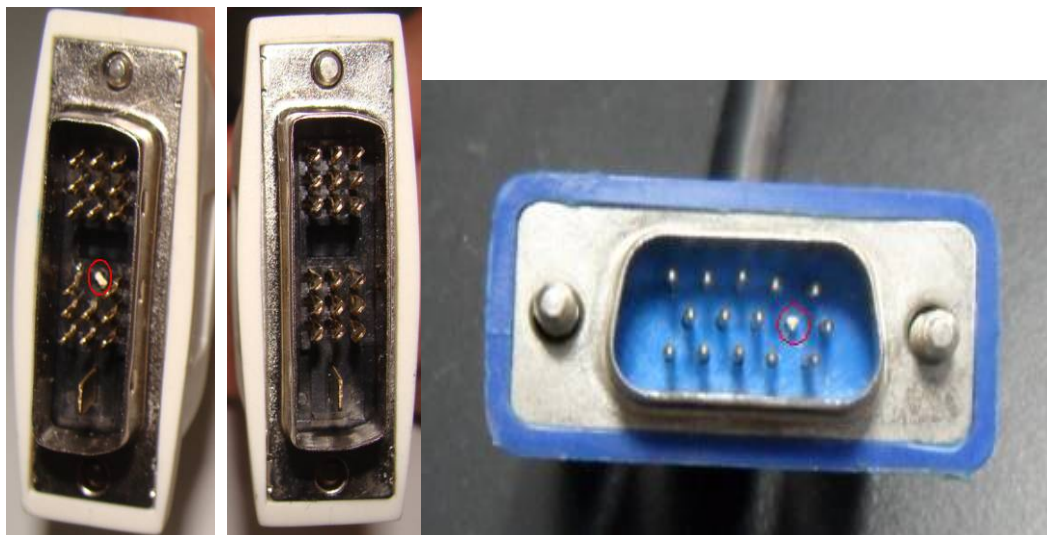
If the burn software is unsuccessful, appear fault :

1. For VGA,the resolution will be not the best achieve.
2. For DVI,No picture, no sound.

If program failed, in VGA mode, you can't use the optimal resolution.

When Read is OK, program is NG, pls do take following action:

1. For VGA,cut off the 9th pin (connect the monitor).
2. For DVI, cut off the 14th pin (the shortest pin, power supply).
3. Connect the EEPROM WP pin to ground.



11. White- Balance, Luminance Adjustment

Approximately 30 minutes should be allowed for warm up before proceeding white balance adjustment.

How to setting MEM channel you can reference to chroma 7120 user guide or simple use “SC” key and “NEXT” Key to modify xyY value and use “ID” key to modify the TEXT description Following is the procedure to do white-balance adjust .

1. Setting the color temp.

A. 6500K color

Warm color temp. parameter is $x=313\pm30$, $y=329\pm30$, $Y>150\text{cd/ m}^2(\text{typ})$

B. 7300K color

Normal color temp. parameter is $x=302\pm30$, $y=318\pm30$, $Y>150\text{cd/ m}^2(\text{typ})$

C. 9300K color

Cool color temp. parameter is $x=283\pm30$, $y=297\pm30$, $Y>150\text{cd/ m}^2(\text{typ})$


D. sRGB color:

sRGB color temp. parameter is $x=313\pm30$, $y=329\pm30$, $Y>150\text{cd/ m}^2(\text{typ})$

2. Enter into the factory mode:

Press the MENU button, pull out the power cord, then plug the power cord. Then the factory OSD will be at the left top of the panel.

3. Bias adjustment:

Set the Contrast  to 50; Adjust the Brightness  to 90.

4. Gain adjustment:

A. Adjust Warm (6500K) color-temperature

1. Switch the chroma-7120 to RGB-Mode (with press “MODE” button)
2. Switch the MEM.channel to Channel 3 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show $x=313\pm30$, $y=329\pm30$, $Y>150\text{cd/ m}^2(\text{typ})$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value $R=100$
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value $G=100$
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value $B=100$
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance $=100\pm2$

B. Adjust Normal (7300K) color-temperature

1. Switch the chroma-7120 to RGB-Mode (with press “MODE” button)
2. Switch the MEM.channel to Channel 4 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show $x=302\pm30$, $y=318\pm30$, $Y>150\text{cd/ m}^2(\text{typ})$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value $R=100$
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value $G=100$
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value $B=100$
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance $=100\pm2$

C. Adjust Cool (9300K) color-temperature

1. Switch the Chroma-7120 to RGB-Mode (with press "MODE" button)
2. Switch the MEM. Channel to Channel 9 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show $x=283\pm30$, $y=297\pm30$, $Y>150\text{cd/ m}^2(\text{typ})$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value $R=100$
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value $G=100$
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value $B=100$
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance $=100\pm2$

D. Adjust sRGB color-temperature

1. Switch the chroma-7120 to RGB-Mode (with press "MODE" button)
2. Switch the MEM.channel to Channel 10 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show $x=313\pm30$, $y=329\pm30$, $Y>150\text{cd/ m}^2(\text{typ})$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value $R=100$
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value $G=100$
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value $B=100$
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance $=100\pm2$

E. Turn the Power-button off to quit from factory mode.

12. Mechanical Instructions

1. Put monitor on the EPE cushion



2. Put monitor front side upwards and top side face to yourself.



3. Open the top side of front bezel with fingers.



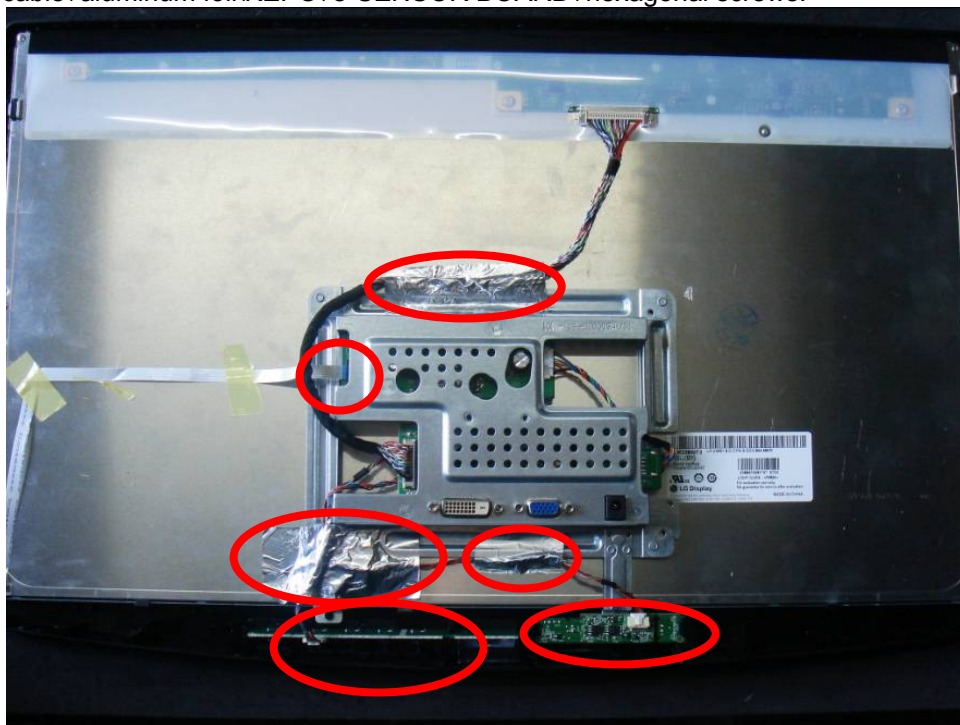
4. Open whole front bezel with a special disassembly tool.

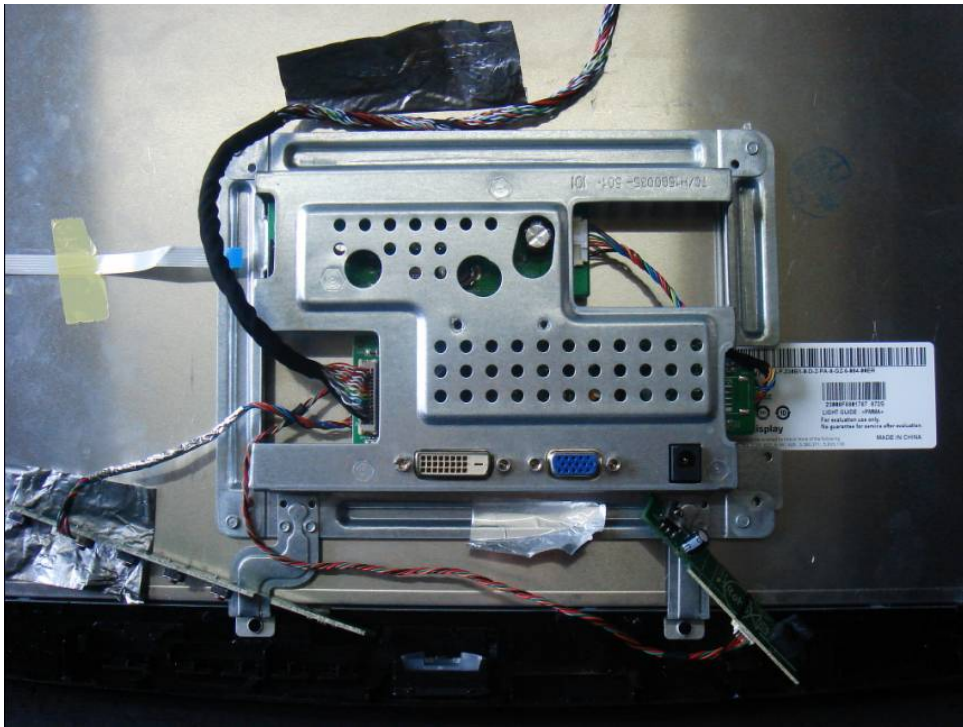


5.Put panel side downwards and take off back cover

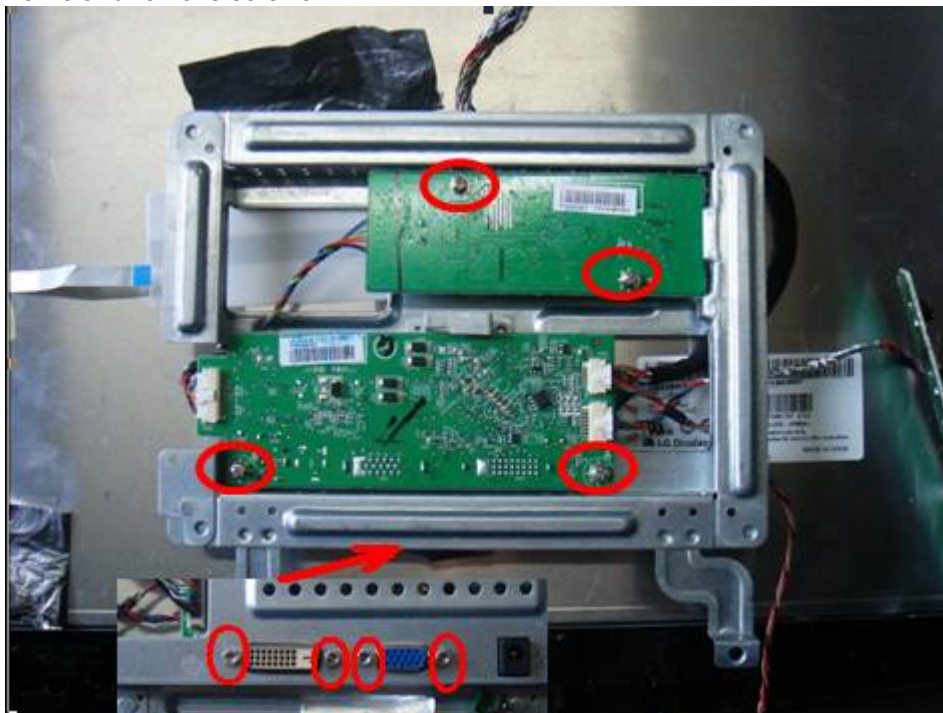


6.Remove lamp cable\ aluminum foil\ KEPC\ e-SENSOR BOARD\ hexagonal screws.

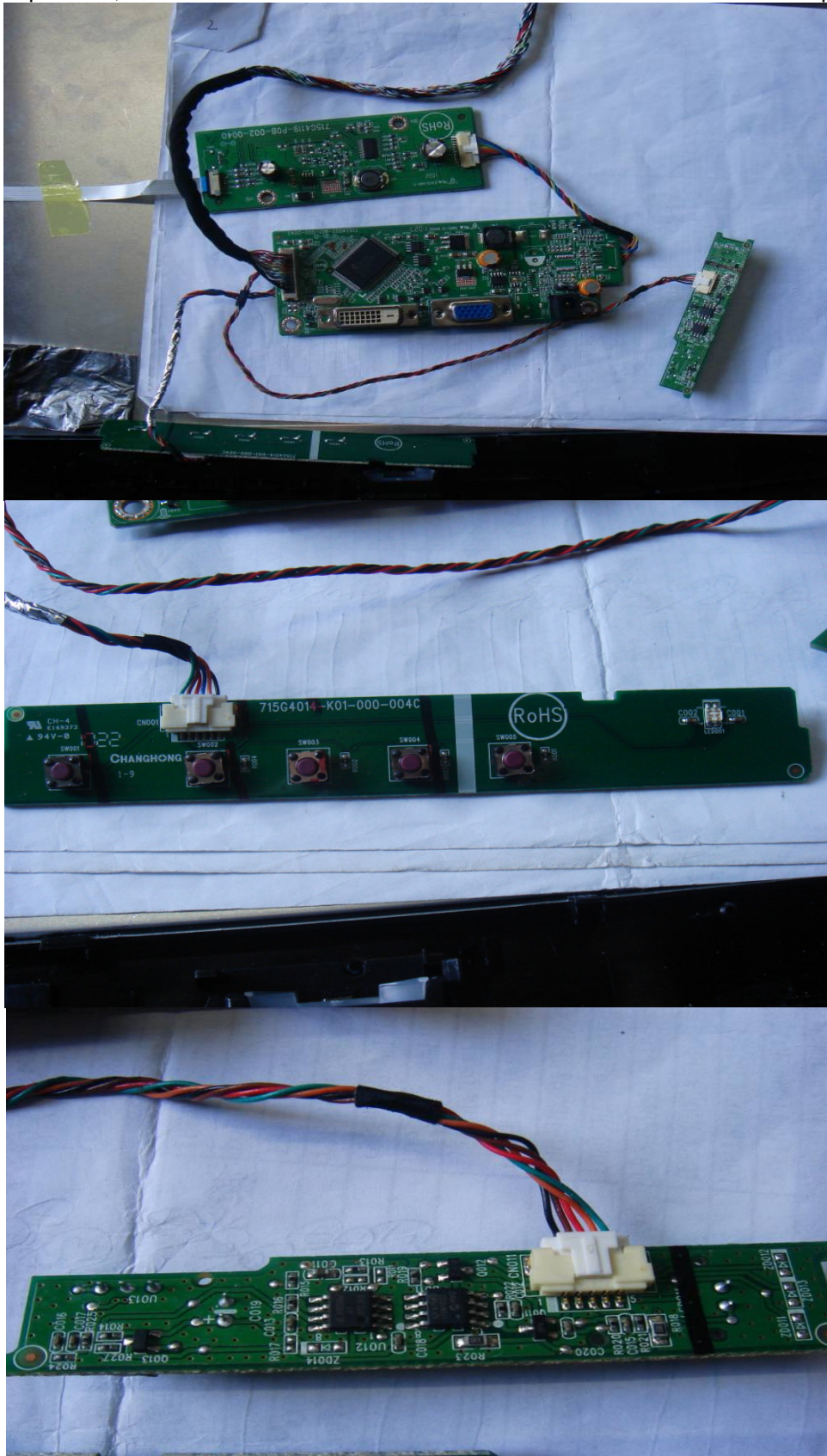




7. Turn over main frame and remove screws



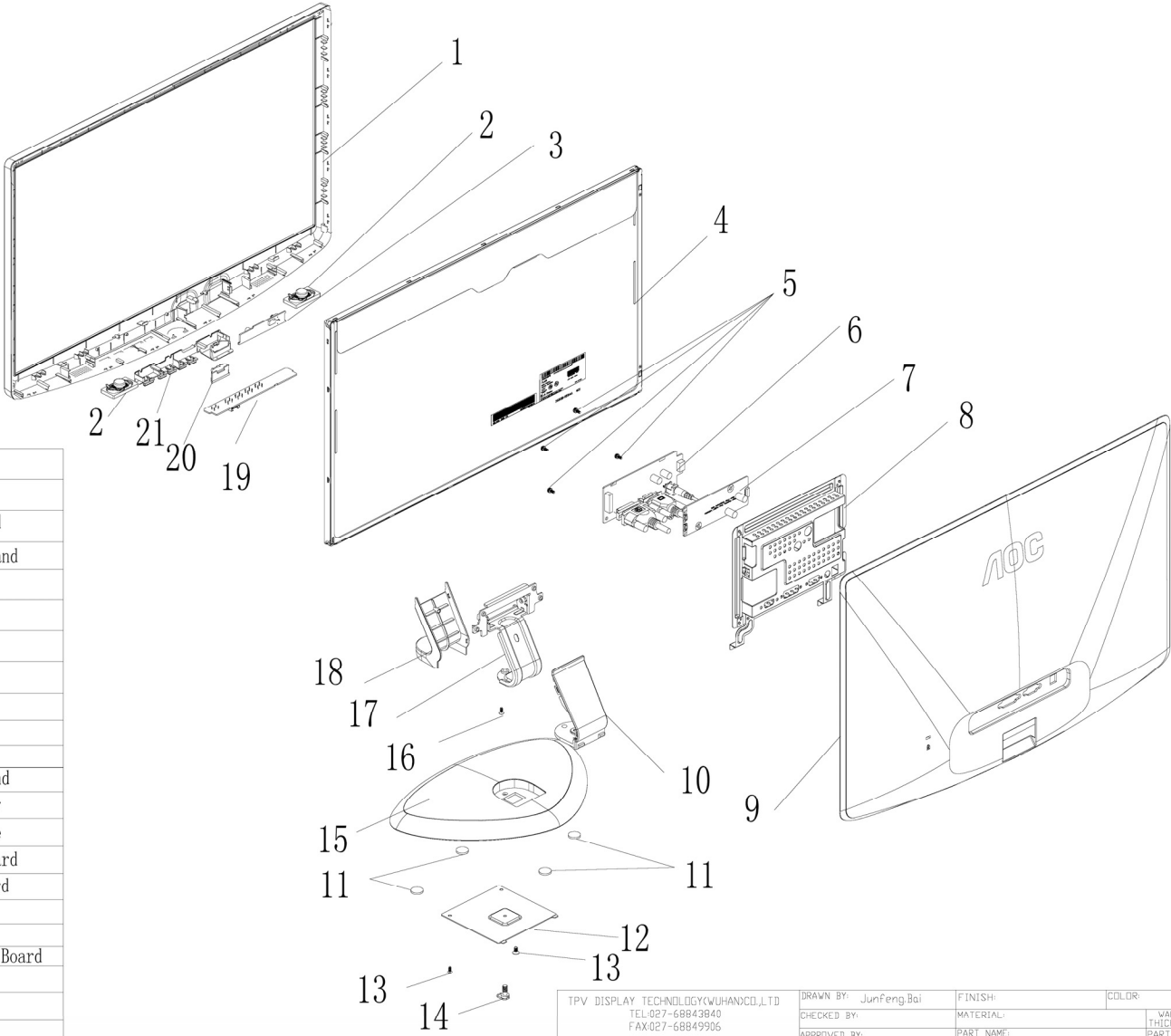
8. Judge the failure position ,disassemble CNPC or CBPC or e-SENSOR BOARD or KEPC and repair



13. Monitor Exploded View

FIRST USED ON: i2340*
PART No.:
REVISION
VERSION: 201
Released for production Junfeng Bai Oct-30-10

21	Key
20	Lens
19	Key Board
18	Front Stand
17	Hinge
16	Screw
15	Base
14	Screw
13	Screw
12	Base BKT
11	Foot
10	Back Stand
9	Rearcover
8	Mainframe
7	Power Board
6	Main Board
5	Screw
4	Panel
3	E-sensor Board
2	Speaker
1	Bezel
项目	名称



TPV DISPLAY TECHNOLOGY(WUHAN)CO.,LTD
TEL:027-68843840
FAX:027-68849906

DRAWN BY: Junfeng Bai
CHECKED BY:
APPROVED BY:

FINISH:
MATERIAL:
PART NAME:

COLOR:

UNIT: MM

SCALE:

DATE:

WALL THICKNESS:

PART NO.

VERSION:

14. BOM List

Note: The parts information listed below are for reference only, and are subject to change without notice. Please go to <http://cs.tpv.com.cn/hello1.asp> for the latest information.

TDAGNT2EWWA4HNE

Location	Part No.	Description	Remark
	040G 581 26704	SHIPPING LABEL	
	040G 58162435A	P/N LABEL FOR MANUAL PE BAG	
	052G 1150 C	INSULATING TAPE	
	052G 1186	SMALL TAPE	
	052G 1211 B	Conductive Tape 85mm *40mm *0.09mm	
	052G 2191 A	PAPER TAPE	
HDCP-L	070GHDCP500HDC	NO-SUGGEST HDCP CODE	
E09504	095G176J 6E03	FFC CABLE 6P 308 1.0	
E09501	095G8018 3DE36	HARNESS 30P-30P 330MM	2nd source
E09501	095G8018 3TE36	HARNESS 30P-30P 330MM	
E09503	095G8022 5DE01	HARNESS 5P(A1253)-5P(A1253) 260MM	2nd source
E09503	095G8022 5TE01	HARNESS 5P(A1253)-5P(A1253) 260MM	
E09502	095G8022 7TE01	HARNESS 7P(1253)-6P(1253) 130	
E09502	095G8022 7WE01	HARNESS 7P-6P 130MM	2nd source
E09505	095G802210TE01	HARNESS 10P(A1253)-10P(A1253) 90	
E09505	095G802210WE01	HARNESS 10P(A1253)-10P(A1253) 90MM	2nd source
	0D1G1030 8120	screw	
	705GHA34030	2440 BASE ASS'Y	
	705GHA34059	i2340v REAR COVER_STAND ASS'Y	
E750	750GBG230F3B13N000	PANEL LM230WF3-SLB1 GZ LGD	
	A34G2365DAVA1M0130	BEZEL FOR i2340	
	H01G6009 1	Screw	
	H15G0035501101	MAIN FRAME FOR i2340	
	H33G0022 1 1L	LENS_AOC_L201WA-2040LED	
	H33G0023AED 1B	KEY PAD_AOC_L201WA-2040LED	
	H40G 58361512A	esensor LABEL	
	H40G 58361513A	win7 EPEAT EPA LABEL	
	H40G 58461523A	I2340Ve POP LABEL	
	H41G780961522A	e2040v QSG	
	H44GD009101	PULP	
	H44GD009201	PULP	
	H44GD009615 1A	I2340Ve CARTON	
	H45G 77 6	PE PACKING	
	H45G 87 1 20	EPE COVER	
	H45G 87 1810H A	EPE COVER FOR BASE	
	H52G6025 16 58	mylar	
	H70G201061546A	I2340Ve CD MANUAL	
	Q45G 76 28 H A	PE BAG FOR MANUAL	
	Q50G 4 10	TIE (Y1900221)	
	Q52G 1185 99	big carton tape for aoc	
	Q52G6019 14	TAPE	
E09504	S95G176T6E03	FFC CABLE 6PIN P1.0MM 308MM	2nd source
	705GHA34030	2440 BASE ASS'Y	
	0Q1G 130 8120	SCREW 42A9930011	
	A34G1867DAV 1M0130	BASE FOR 2440	
	H15G0042101	BASE BRACKET	
	705GHA34059	i2340v REAR COVER_STAND ASS'Y	
	0M1G1740 10120	SCREW 42A9940008	
	0Q1G 140 8120	SCREW T4X8	

	A34G1865DBA 1B0100	STAND	
	A34G1866DBA 1B0100	STAND	
	A34G2366DAV 1M0100	REAR COVER FOR I2340	
	A37G0164012	HINGE_ASSj_Y	
	756GHACB A1073	MAIN BOARD-CBPC9NRA1H5	
SMTCA-U402	100GANGD000W11	MCU ASS'Y-056G2233 11	
	808GI2340VETPE	I2340VE Chinese Taipei ASS'Y	
E08903	089G1745CAA 9	DVI CABLE 1500	2nd source
E08903	089G1745GAA 9	DVI CABLE	2nd source
E08903	089G1745HAA 9	DVI CABLE 1.5M	
E08901	089G420A15N IS	AC POWER CORD 1500MM TAIWAN	
	H26G 800504 2B	barcode	
	H40G 24N61538A	I2340VE TW ID LABEL	
	H40G 58261572A	AOC TW WARRANTY LABEL	
	H40G 58461536A	I2340VE TW CARTON LABEL	
	H41G780961540A	TW WARRANTY BOOKLIST	
	CBPC9NRA1H5	MAIN BOARD	
	040G 45762412B	CBPC LABEL	
C718	067G204V181 3K	CS CAP 180uF 16V 8*8 mm	
C716	067G204V471 2K	CS CAP 470uF 10V 8*8 mm	
FB702	071G 5526A H	CORE 6.0X3.5X3.5 127 25% 3.5X6.0	
CN701	088G 304 11 C	DC POWER JACK 3P 2.5mm	
CN101	088G 35315FVCL	D-SUB CONN 15P V/T 10.5mm WITH SCREW	
CN102	088G 35424F VC	DVI CONN 24P V/T WITH SCREW	
X401	093G 2251B J	CRYSTAL 12MHZ NXS12.000AC30F-KAB10	
	Q55G 23524	WELDING FLUX WITHOUT PB	
	Q55G 100625	TIN STICK_LOW ARGENTUM	
CN402	033G8032 5F HR	CONNECTOR	
CN401	033G8032 7F HR	CONNECTOR	
CN702	033G803210F HR	CONNECTOR 10P 1.25	
U401	056G 562328	IC Scaler NT68668AUFG QFP-128	
U704	056G 563113	IC G1117-18T63Uf 1A/1.8V SOT-223	
U705	056G 563215	IC DC/DC MP1584EN SOIC8E	
U702	056G 563512	IC G1117-33T43UF 1A/3.3V TO-252	
U103	056G 662502	IC ESD AZC199-04S.R7G SOT23-6L	
U104	056G 662502	IC ESD AZC199-04S.R7G SOT23-6L	
U105	056G 662502	IC ESD AZC199-04S.R7G SOT23-6L	
U106	056G 662502	IC ESD AZC199-04S.R7G SOT23-6L	
U107	056G 662502	IC ESD AZC199-04S.R7G SOT23-6L	
U102	056G1133 34	M24C02-WMN6TP	
U101	056G1133 34	M24C02-WMN6TP	
U402	056G2233 11	IC Pm25LD020C-SCE SIOC-8(150mil) 2M	
Q401	057G 417517	Tra LMBT3906LT1G -200mA/-40V SOT-23 LRC	
Q402	057G 417517	Tra LMBT3906LT1G -200mA/-40V SOT-23 LRC	
Q302	057G 417518	TRA LMBT3904LT1G 200mA/40V SOT-23 LRC	
Q701	057G 417518	TRA LMBT3904LT1G 200mA/40V SOT-23 LRC	
Q301	057G 763940	MOSFET AO3401A SOT-23	
R406	061G0402000 JY	NO-SUGGEST RST CHIPR MAX 0R05 OHM 1/16W	
R408	061G0402000 JY	NO-SUGGEST RST CHIPR MAX 0R05 OHM 1/16W	
R427	061G0402000 JY	NO-SUGGEST RST CHIPR MAX 0R05 OHM 1/16W	
R115	061G0402100 JY	NO-SUGGEST RST CHIPR 10 OHM +-5% 1/16W Y	
R111	061G0402100 JY	NO-SUGGEST RST CHIPR 10 OHM +-5% 1/16W Y	
R105	061G0402100 JY	NO-SUGGEST RST CHIPR 10 OHM +-5% 1/16W Y	
R134	061G0402100 JY	NO-SUGGEST RST CHIPR 10 OHM +-5% 1/16W Y	
R132	061G0402100 JY	NO-SUGGEST RST CHIPR 10 OHM +-5% 1/16W Y	

R131	061G0402100 JY	NO-SUGGEST RST CHIPR 10 OHM +-5% 1/16W Y	
R130	061G0402100 JY	NO-SUGGEST RST CHIPR 10 OHM +-5% 1/16W Y	
R129	061G0402100 JY	NO-SUGGEST RST CHIPR 10 OHM +-5% 1/16W Y	
R128	061G0402100 JY	NO-SUGGEST RST CHIPR 10 OHM +-5% 1/16W Y	
R127	061G0402100 JY	NO-SUGGEST RST CHIPR 10 OHM +-5% 1/16W Y	
R126	061G0402100 JY	NO-SUGGEST RST CHIPR 10 OHM +-5% 1/16W Y	
R706	061G0402101 JY	NO-SUGGEST RST CHIPR 100 OHM +-5% 1/16W	
R435	061G0402101 JY	NO-SUGGEST RST CHIPR 100 OHM +-5% 1/16W	
R420	061G0402101 JY	NO-SUGGEST RST CHIPR 100 OHM +-5% 1/16W	
R419	061G0402101 JY	NO-SUGGEST RST CHIPR 100 OHM +-5% 1/16W	
R401	061G0402101 JY	NO-SUGGEST RST CHIPR 100 OHM +-5% 1/16W	
R119	061G0402101 JY	NO-SUGGEST RST CHIPR 100 OHM +-5% 1/16W	
R118	061G0402101 JY	NO-SUGGEST RST CHIPR 100 OHM +-5% 1/16W	
R113	061G0402101 JY	NO-SUGGEST RST CHIPR 100 OHM +-5% 1/16W	
R104	061G0402101 JY	NO-SUGGEST RST CHIPR 100 OHM +-5% 1/16W	
R103	061G0402101 JY	NO-SUGGEST RST CHIPR 100 OHM +-5% 1/16W	
R101	061G0402101 JY	NO-SUGGEST RST CHIPR 100 OHM +-5% 1/16W	
R437	061G0402102 JY	NO-SUGGEST RST CHIPR 1KOHM +-5% 1/16W YA	
R436	061G0402102 JY	NO-SUGGEST RST CHIPR 1KOHM +-5% 1/16W YA	
R426	061G0402102 JY	NO-SUGGEST RST CHIPR 1KOHM +-5% 1/16W YA	
R413	061G0402103 JY	NO-SUGGEST RST CHIPR 10KOHM +-5% 1/16W Y	
R412	061G0402103 JY	NO-SUGGEST RST CHIPR 10KOHM +-5% 1/16W Y	
R705	061G0402103 JY	NO-SUGGEST RST CHIPR 10KOHM +-5% 1/16W Y	
R703	061G0402103 JY	NO-SUGGEST RST CHIPR 10KOHM +-5% 1/16W Y	
R702	061G0402103 JY	NO-SUGGEST RST CHIPR 10KOHM +-5% 1/16W Y	
R418	061G0402103 JY	NO-SUGGEST RST CHIPR 10KOHM +-5% 1/16W Y	
R417	061G0402103 JY	NO-SUGGEST RST CHIPR 10KOHM +-5% 1/16W Y	
R403	061G0402103 JY	NO-SUGGEST RST CHIPR 10KOHM +-5% 1/16W Y	
R402	061G0402103 JY	NO-SUGGEST RST CHIPR 10KOHM +-5% 1/16W Y	
R305	061G0402103 JY	NO-SUGGEST RST CHIPR 10KOHM +-5% 1/16W Y	
R120	061G0402103 JY	NO-SUGGEST RST CHIPR 10KOHM +-5% 1/16W Y	
R726	061G0402104 JY	RST CHIPR 100KOHM +-5% 1/16W YAGEO	
R712	061G0402104 JY	RST CHIPR 100KOHM +-5% 1/16W YAGEO	
R415	061G0402104 JY	RST CHIPR 100KOHM +-5% 1/16W YAGEO	
R306	061G0402104 JY	RST CHIPR 100KOHM +-5% 1/16W YAGEO	
R135	061G0402104 JY	RST CHIPR 100KOHM +-5% 1/16W YAGEO	
R434	061G0402105 JY	RST CHIPR 1000KOHM 1/16W YAGEO	
R714	061G04021301FY	RST CHIPR 1K3 +-1% 1/16W YAGEO	
R106	061G0402222 JY	RST CHIPR 2.2KOHM +-5% 1/16W YAGEO	
R107	061G0402222 JY	RST CHIPR 2.2KOHM +-5% 1/16W YAGEO	
R704	061G0402223 JY	RST CHIPR 22KOHM +-5% 1/16W YAGEO	
R304	061G0402223 JY	RST CHIPR 22KOHM +-5% 1/16W YAGEO	
R136	061G0402223 JY	RST CHIPR 22KOHM +-5% 1/16W YAGEO	
R123	061G0402223 JY	RST CHIPR 22KOHM +-5% 1/16W YAGEO	
R139	061G0402224 JY	RST CHIPR 220KOHM +-5% 1/16W YAGEO	
R416	061G0402224 JY	RST CHIPR 220KOHM +-5% 1/16W YAGEO	
R727	061G0402304 JF	RST 0402 300K 5% 1/16W FENGHUA	
R711	061G0402333 JY	RST CHIPR 33KOHM £«-5£¥ 1/16W YAGEO	
R433	061G04023901FY	RST CHIP 3.9KOHM 1% YAGEO	
R432	061G04023901FY	RST CHIP 3.9KOHM 1% YAGEO	
R431	061G04023901FY	RST CHIP 3.9KOHM 1% YAGEO	
R133	061G0402394 JY	RST CHIP R 390K +/-5% 1/16W YAGEO	
R109	061G0402470 JY	NO-SUGGEST RST CHIPR 47 OHM 5% 1/16W YAG	
R114	061G0402470 JY	NO-SUGGEST RST CHIPR 47 OHM 5% 1/16W YAG	
R117	061G0402470 JY	NO-SUGGEST RST CHIPR 47 OHM 5% 1/16W YAG	

R414	061G04024700FY		RST CHIP 470R 1/16W 1%	
R110	061G0402471 JY		RST CHIPR 470OHM +-5% 1/16W YAGEO	
R422	061G0402472 JY		RST CHIPR 4.7KOHM +-5% 1/16W YAGEO	
R411	061G0402472 JY		RST CHIPR 4.7KOHM +-5% 1/16W YAGEO	
R410	061G0402472 JY		RST CHIPR 4.7KOHM +-5% 1/16W YAGEO	
R303	061G0402472 JY		RST CHIPR 4.7KOHM +-5% 1/16W YAGEO	
R138	061G0402472 JY		RST CHIPR 4.7KOHM +-5% 1/16W YAGEO	
R137	061G0402472 JY		RST CHIPR 4.7KOHM +-5% 1/16W YAGEO	
R125	061G0402472 JY		RST CHIPR 4.7KOHM +-5% 1/16W YAGEO	
R124	061G0402472 JY		RST CHIPR 4.7KOHM +-5% 1/16W YAGEO	
R713	061G04026801FY		RST CHIP 6K8 1/16W 1%	
R108	061G0402750 JY		NO-SUGGEST RST CHIPR 75OHM +-5% 1/16W YA	
R112	061G0402750 JY		NO-SUGGEST RST CHIPR 75OHM +-5% 1/16W YA	
R116	061G0402750 JY		NO-SUGGEST RST CHIPR 75OHM +-5% 1/16W YA	
R707	061G0603000 JF		RST CHIPR MAX 0R05 1/10W FENGHUA	
R102	061G0603000 JF		RST CHIPR MAX 0R05 1/10W FENGHUA	
FB703	061G0603000 JF		RST CHIPR MAX 0R05 1/10W FENGHUA	
FB103	061G0603000 JF		RST CHIPR MAX 0R05 1/10W FENGHUA	
FB102	061G0603000 JF		RST CHIPR MAX 0R05 1/10W FENGHUA	
FB101	061G0603000 JF		RST CHIPR MAX 0R05 1/10W FENGHUA	
R404	061G0603221 JF		ST CHIPR 220 OHM +-5% 1/10W FENGHUA	
R405	061G0603331 JF		RST CHIPR 330OHM +-5% 0603	
FB401	061G0805000 JF		RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R302	061G1206221 JF		RST CHIPR 220 OHM +-5% 1/4W FENGHUA	
R301	061G1206221 JF		RST CHIPR 220 OHM +-5% 1/4W FENGHUA	
C107	065G040210232K	A	CAP 0402 1NF K 50V X7R	
C118	065G040210232K	A	CAP 0402 1NF K 50V X7R	
C119	065G040210232K	A	CAP 0402 1NF K 50V X7R	
C714	065G040210232K	A	CAP 0402 1NF K 50V X7R	
C422	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C425	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C427	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C431	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C432	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C433	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C434	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C435	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C437	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C438	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C702	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C705	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C706	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C708	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C709	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C713	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C717	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C720	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C112	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C115	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C120	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C121	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C122	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C124	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C125	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C126	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	

C301	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C419	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C418	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C417	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C407	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C405	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C403	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C402	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C401	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C304	065G040210412K	Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C712	065G040210427Z	T	NO-SUGGEST 0402 0.1UF 25V Y5V	
C719	065G040210427Z	T	NO-SUGGEST 0402 0.1UF 25V Y5V	
C722	065G040215131J	Y	CHIP 150pF 50V NPO YAGEO	
C103	065G040222031J	A	CAP 0402 22PF J 50V NPO	
C104	065G040222031J	A	CAP 0402 22PF J 50V NPO	
C429	065G040222417Z	A	NO-SUGGEST CAP CHIP 0402 220nF Z 16V Y5V	
C303	065G040222417Z	A	NO-SUGGEST CAP CHIP 0402 220nF Z 16V Y5V	
C117	065G040222417Z	A	NO-SUGGEST CAP CHIP 0402 220nF Z 16V Y5V	
C116	065G040222417Z	A	NO-SUGGEST CAP CHIP 0402 220nF Z 16V Y5V	
C428	065G040227031J	A	CAP 0402 27PF 50V NPO	
C426	065G040227031J	A	CAP 0402 27PF 50V NPO	
C114	065G040247312K	A	8.31HIP 0402 47nF K 16V X7R	
C111	065G040247312K	A	8.31HIP 0402 47nF K 16V X7R	
C110	065G040247312K	A	8.31HIP 0402 47nF K 16V X7R	
C108	065G040247312K	A	8.31HIP 0402 47nF K 16V X7R	
C106	065G040247312K	A	8.31HIP 0402 47nF K 16V X7R	
C102	065G040247312K	A	8.31HIP 0402 47nF K 16V X7R	
C105	065G040250931J	A	CAP 0402 5PF J 50 NPO	
C109	065G040250931J	A	CAP 0402 5PF J 50 NPO	
C113	065G040250931J	A	CAP 0402 5PF J 50 NPO	
C715	065G060310232K	F	CAP CHIP 0603 1NF K 50V X7R	
C710	065G060310232K	F	CAP CHIP 0603 1NF K 50V X7R	
C305	065G060310512K	A	CAP 0603 1UF 10% 16V X7R	
C408	065G060310512K	A	CAP 0603 1UF 10% 16V X7R	
C414	065G060310512K	A	CAP 0603 1UF 10% 16V X7R	
C415	065G060310512K	A	CAP 0603 1UF 10% 16V X7R	
C424	065G060310512K	A	CAP 0603 1UF 10% 16V X7R	
C439	065G0805475A2K	Y	CAP CHIP 0805 4.7UF K 10V X7R	
C423	065G0805475A2K	Y	CAP CHIP 0805 4.7UF K 10V X7R	
C421	065G0805475A2K	Y	CAP CHIP 0805 4.7UF K 10V X7R	
C416	065G0805475A2K	Y	CAP CHIP 0805 4.7UF K 10V X7R	
C413	065G0805475A2K	Y	CAP CHIP 0805 4.7UF K 10V X7R	
C406	065G0805475A2K	Y	CAP CHIP 0805 4.7UF K 10V X7R	
C404	065G0805475A2K	Y	CAP CHIP 0805 4.7UF K 10V X7R	
C721	065G120610625K	Y	CAP CHIP 1206 10uF K 25V X5R	
C723	065G120610625K	Y	CAP CHIP 1206 10uF K 25V X5R	
C302	065G120622617Z	Y	NO-SUGGEST CHIP 1206 22UF Z 16V Y5V	
C704	065G120622617Z	Y	NO-SUGGEST CHIP 1206 22UF Z 16V Y5V	
C707	065G120622617Z	Y	NO-SUGGEST CHIP 1206 22UF Z 16V Y5V	
FB301	071G 56K121	M	CHIP BEAD 120OHM 6A MGLB2012-120T-LF	
FB407	071G 56V301	B	CHIP BEAD 0805 300OHM BULLWILL	
FB405	071G 56V301	B	CHIP BEAD 0805 300OHM BULLWILL	
FB404	071G 56V301	B	CHIP BEAD 0805 300OHM BULLWILL	
FB403	071G 56V301	B	CHIP BEAD 0805 300OHM BULLWILL	
FB402	071G 56V301	B	CHIP BEAD 0805 300OHM BULLWILL	

FB104	071G 59G301	CHIP BEAD 300OHM	
FB105	071G 59G301	CHIP BEAD 300OHM	
FB106	071G 59G301	CHIP BEAD 300OHM	
L701	073G253S521 H	SMD CHOKE 22UH 20% 3.3A HF	
D101	093G 64 42 L	DIODE LBAV70LT1G SOT-23 LRC	
D102	093G 64 42 L	DIODE LBAV70LT1G SOT-23 LRC	
ZD101	093G 39GA01 T	RLZ5.6B	
D708	093G3004 3	SM340A	
D707	093G3004 3	SM340A	
D704	093G3004 3	SM340A	
D701	093G3004 3	SM340A	
D703	093G3004 3	SM340A	
CN301	311GW125A30ACH	WAFER 1.25mm 30P	
	715G4002M01000004S	MAIN BOARD PCB	
E080	ADPCA1248HD1	ADAPTER BOARD	
	040G 154501 1	HI-POT GND LABEL	
	040G 45762412B	CBPC LABEL	
	045G 88525 E	PE BAG	
	052G 1211 A	Tasma aluminiowa	
IC903	056G 139 3A	PC123Y22FZOF SHARP	
NR901	061G 58901 WT	NTC 1R 15% SCK10015LSY001 BY THINKING	
C903	063G107K474 6S	0.47UF +-10%	
C925	065G 1K103 2E6921	CAP CER 10NF K 1KV Y5U	
C902	065G305M1022EP	CAP Y2 1000PF M 250VAC	
C901	065G305M1022EP	CAP Y2 1000PF M 250VAC	
C909	065G306M3322BP	Y1 CAP 3300PF M 250VAC	
C919	067G215C6814RV	EC ZLH 680UF 25V 10*16	
C921	067G215C6814RV	EC ZLH 680UF 25V 10*16	
C904	067G215Y10115L	EC 100UF 20% 450V 18*35.5	
D901	071G 55 30	FERRITE BEAD 4.0*2*3	
D902	071G 55 30	FERRITE BEAD 4.0*2*3	
D904	071G 55 30	FERRITE BEAD 4.0*2*3	
Q901	071G 55 30	FERRITE BEAD 4.0*2*3	
L902	073G 253191 H	IND CHOKE 1.1uH DADON	
L901	073L 174 40H1G	LINE FILTER 30.0mH MIN	
T901	080GL19T507 N	X'FMR 2.0MH 5% 25UH MAX	
LED2	081G 2 3 1P	LED GPG2603T/R006-35A GUANGPU	
CN901	087G 50132A DL	AC SOCKET 3PIN	
	089G 171535 G	DC POWER CORD 1000MM	
D902	093G 5212T52T	DIODE 1N4007-AO DO-41	
D901	093G 5212T52T	DIODE 1N4007-AO DO-41	
	705GHA93004	D904 ASS'Y	
	705GQA57011	Q901 ASS'Y	
	709G 901 HM001	CONSUMPTIVE ASS'Y	
	715G 901 2 4A6437	ADAPTER BOARD PCB	
	H33G0024 1 1C	LENS	
	H33G0025 GM T 18	BOTTOM COVER_ADAPTER	
	H33G0026 GM T 18	TOP COVER_ADAPTER	
GND1	Q09G6014 1	PIN	
GND2	Q09G6014 1	PIN	
GND4	Q09G6014 1	PIN	
GND3	Q09G6014 1	PIN	
	Q40G000162429A	LABEL	
	Q40G000362427A	LABEL	
	Q40G375B690 1A	LABEL	

	Q52G 1205106	CU FOIL	
BD901	093G 50460900	BRIDGE 4A/800V GBU408 LITEON	
	005G 42 1	CUSHION	
	012G 372 1	SILICONE RUBBER	
D904	093G 60310	DIODE V30100C-E3/4W 30A/100V TO-220AB	
	0M1G 930 6120	screw	
HS1	Q90G0171 1	heat sink	
Q901	057G 667924	MOSFET SMK0965F	
	0M1G 930 6120	screw	
HS2	Q90G0168 1	HEAT SINK	
E55	055G 23524	WELDING FLUX WITHOUT PB	
	Q51G 6 4509	GLUE_RTV	
	Q55G 100625	TIN STICK_LOW ARGENTUM	
IC901	056G 379530	AC/DC CONVERTER LD7750GS SOP-8	
R968	061G0603222 JT	RST CHIP 2K2 1/10W 5% TZAI YUAN	
C908	061G0805104 JT	RST CHIPR 100KOHM +- 5% 1/8W TZAI YUAN	
R986	061G0805203 JT	RST CHIPR 20K +-5% 1/8W TZAI YUAN	
R909	061G0805221 JT	RST CHIP 220R 1/8W 5% TZAI YUAN	
R916	061G08052491FT	RST CHIP 2K49 1/8W 1%	
R920	061G1206100 JT	RST CHIPR 10 OHM +-5% 1/4W TZAI YUAN	
R910	061G1206103 JT	RST CHIPR 10KOHM +-5% 1/4W TZAI YUAN	
R921	061G1206105 JF	RST CHIPR 1 MOHM +-5% 1/4W FENGHUA	
R907	061G1206229 JT	RST CHIPR 2R2 +-5% 1/4W TZAI YUAN	
R967	061G1206434 JF	RST CHIPR 430KOHM +-5% 1/4W FENGHUA	
R922	061G1206434 JF	RST CHIPR 430KOHM +-5% 1/4W FENGHUA	
R914	061G1206434 JF	RST CHIPR 430KOHM +-5% 1/4W FENGHUA	
R906	061G1206434 JF	RST CHIPR 430KOHM +-5% 1/4W FENGHUA	
R908	061G1206470 JT	RST CHIPR 47 OHM +-5% 1/4W TZAI YUAN	
R917	061G1206472 JT	RST CHIP R 4K7 1/4W +/-5%	
R904	061G1206473 JT	RST CHIPR 47 KOHM +-5% 1/4W TZAI YUAN	
R923	061G1206510 JT	RST CHIPR 51 OHM +-5% 1/4W TZAI YUAN	
R913	061G1206510 JT	RST CHIPR 51 OHM +-5% 1/4W TZAI YUAN	
R912	061G1206510 JT	RST CHIPR 51 OHM +-5% 1/4W TZAI YUAN	
R918	061G12065100FT	RST CHIPR 510R 1/4W +-1% TZAI YUAN	
R903	061G1206684 JT	RST CHIPR 680 KOHM +-5% 1/4W TZAI YUAN	
R902	061G1206684 JT	RST CHIPR 680 KOHM +-5% 1/4W TZAI YUAN	
R901	061G1206684 JT	RST CHIPR 680 KOHM +-5% 1/4W TZAI YUAN	
R919	061G12069761FT	RST CHIPR 9.76 KOHM +-1% 1/4W TZAI YUAN	
C911	065G080510332K F	CAP 0805 10NF K 50V X7R	
C922	065G080510432K A	CAP CHIP 0805 0.1UF K 50V X7R	
C923	065G080510522K T	CAP 0805 1UF 10% 25V X7R	
C915	065G080522332K F	CAP 0805 22NF K 50V X7R	
C912	065G080533131J F	CAP CHIP 0805 330PF J 50V NPO	
C914	065G120622272K Y	CER 1206 2N2 500V X7R 10%	
C916	065G120622272K Y	CER 1206 2N2 500V X7R 10%	
C920	065G120647522K T	CAP CHIP 1206 4.7uF K 25V X7R	
T901	006G 31 4	1.7MM RIVET	
CN901	006G 31500	EYELET	
L901	006G 31502	1.5MM RIVET	
IC904	056G 158 10 T	LDO IC AZ431AZ-AE1 TO-92 150MA 40V TO-92	
R911	061G152M62852T SY	RST MOFR 0.62 OHM +-5% 2WS	
C926	065G 2K222 2T6921	CAP CER 2200PF K 2KV Y5P	
C906	067G 2154707NT	KY50VB47M-TP5 6.3*11	
F901	084G 56 4W	FUSE 4A 250V	
J901	095G 90 23	JUMPER WIRE	

J902	095G 90 23	JUMPER WIRE	
J903	095G 90 23	JUMPER WIRE	
	709G 901 HA001	CONSUMPTIVE ASS'Y	
	715G 901 2 156403	ADAPTER BOARD PCB	
	KEPC9HC2	KEY BOARD	
SW001	077G603S AI HJ	TACT SWITCH AI 2PIN SEALED	
SW002	077G603S AI HJ	TACT SWITCH AI 2PIN SEALED	
SW003	077G603S AI HJ	TACT SWITCH AI 2PIN SEALED	
SW004	077G603S AI HJ	TACT SWITCH AI 2PIN SEALED	
SW005	077G603S AI HJ	TACT SWITCH AI 2PIN SEALED	
CN001	033G8032 6F HR	CONNECTOR 6P 1.25	
R002	061G0603000 FF	RST CHIPR MAX0R01 1/10W FENGHUA	
R004	061G06031001FF	RST CHIPR 1 KOHM +-1% 1/10W FENGHUA	
R003	061G06032001FF	RST CHIP 2KOHM 1% 1/10W FENGHUA	
R001	061G06032001FF	RST CHIP 2KOHM 1% 1/10W FENGHUA	
C002	065G060310432K A	CAP CHIP 0603 100nF K 50V X7R	
C001	065G060310432K A	CAP CHIP 0603 100nF K 50V X7R	
LED001	081G 14 12 GP	CHIP LED GPTD1210YBC5-D	
E715	715G4014K01000004C	KEY BOARD PCB	
E715	715G4014K01000004S	KEY BOARD PCB	2nd source
	LNPCAD481GHD1	CONVERTER BOARD	
	040G 45762412B	CBPC LABEL	
C807	067G215C4799KV	EC 4.7UF 20% 100V EM 8*9	
C809	067G215P1017KV	EC 100UF 20% 50V 10X9	
	709G3823 HM001	COMSUPTIVE ASS'Y	
CN803	033G8019 6K H JS	FPC CONN 1.0mm 6P	
CN801	033G803210F HR	CONNECTOR 10P 1.25	
U801	056G 700 5	IC LED driver MP3389EF TSSOP28	
Q806	057G 763947	MOSFET APM8005KCTRG SOP-8	
R832	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R833	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R819	061G06031002FT	RST CHIP 10K 1/10W 1%	
R806	061G0603102 JF	RST CHIPR 1K OHM +-5% 1/10W FENGHUA	
R808	061G0603102 JF	RST CHIPR 1K OHM +-5% 1/10W FENGHUA	
R822	061G0603103 JF	RST CHIPR 10K OHM +-5% 1/10W FENGHUA	
R804	061G0603104 JF	RST CHIPR 100KOHM 5% 1/10W FENGHUA	
R807	061G0603104 JF	RST CHIPR 100KOHM 5% 1/10W FENGHUA	
R810	061G0603104 JF	RST CHIPR 100KOHM 5% 1/10W FENGHUA	
R803	061G06032402FT	RST CHIPR 24K +-1% 1/10W TZAI YUAN	
R802	061G06033003FF	RST CHIPR 300KOHM 1/10W FENGHUA	
R809	061G06036801FF	RST CHIPR 6.8KOHM +-1% 1/10W FENGHUA	
R826	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R838	061G0805109 JT	RST CHIP 1R 1/8W 5% TZAI YUAN	
R837	061G0805109 JT	RST CHIP 1R 1/8W 5% TZAI YUAN	
R836	061G0805109 JT	RST CHIP 1R 1/8W 5% TZAI YUAN	
R835	061G0805109 JT	RST CHIP 1R 1/8W 5% TZAI YUAN	
R815	061G0805109 JY	RST CHIP 1R 1/8W 5% YAGEO	
R805	061G0805304 JY	RST CHIPR 300K +-5% 1/8W YAGEO	
R818	061G1206000 JF	RST CHIPR MAX0R05 1/4W FENGHUA	
R812	061G12061007FF	RST 1206 0.1R 1% 1/4W	
R813	061G12061007FF	RST 1206 0.1R 1% 1/4W	
R801	061G12061009FT	RST CHIP R 10ohm 1/4W +-1%	
C806	065G060310131J F	CAP CHIP 0603 100PF J 50V NPO	
C802	065G060368332K F	CAP CHIP 0603 68NF K 50V X7R	
C805	065G080522141J Y	CAP CHIP 0805 220P 100V NP0 +/-5%	

C804	065G080547332K Y	CAP CHIP 0805 47N 50V X7R +/-10%	
C803	065G080547332K Y	CAP CHIP 0805 47N 50V X7R +/-10%	
C801	065G080547422K Y	CAP CHIP 0805 0.47UF K 25V X7R	
L801	073G253S 19 H	SMD CHOKE 33uH+-20% 3A	
D801	093G 60S907 T	SCHOTTKY B3100B 3A 100V SMB	
	715G4119P01002004C	CONVERTER BOARD PCB	
	LSPC9HC2	LIGHT SENSOR BOARD	
U013	056G 627911	IR 38KHZ KSM-603TM2M	
C019	067G305M1013KV	105 摄氏度 100UF +/-20% 16V	
LED011	081G IR 7 GP	IR LED GP1303T12A/940-2-35	
	H12G6200 13	RUBBER	
U012	056G 192 25	D-AMP AS358MTR-E1 SOIC-8	
U011	056G1125200	IC MCU PIC12F615-I/SN SOIC-8	
Q011	057G 417 16 T	MMBT2907	
Q012	057G 761 18 T	TEST ONLY SST2222A 0.4 60 SMT3	
Q013	057G 761 18 T	TEST ONLY SST2222A 0.4 60 SMT3	
R025	061G0402101 JY	NO-SUGGEST RST CHIPR 100 OHM +/-5% 1/16W	
R027	061G0402102 JY	NO-SUGGEST RST CHIPR 1KOHM +/-5% 1/16W YA	
R021	061G0402102 JY	NO-SUGGEST RST CHIPR 1KOHM +/-5% 1/16W YA	
R020	061G0402102 JY	NO-SUGGEST RST CHIPR 1KOHM +/-5% 1/16W YA	
R019	061G0402102 JY	NO-SUGGEST RST CHIPR 1KOHM +/-5% 1/16W YA	
R014	061G0402102 JY	NO-SUGGEST RST CHIPR 1KOHM +/-5% 1/16W YA	
R022	061G0402103 JY	NO-SUGGEST RST CHIPR 10KOHM +/-5% 1/16W Y	
R024	061G0402103 JY	NO-SUGGEST RST CHIPR 10KOHM +/-5% 1/16W Y	
R015	061G0402104 JY	RST CHIPR 100KOHM +/-5% 1/16W YAGEO	
R016	061G0402104 JY	RST CHIPR 100KOHM +/-5% 1/16W YAGEO	
R013	061G0402472 JY	RST CHIPR 4.7KOHM +/-5% 1/16W YAGEO	
R023	061G0805330 JT	RST CHIP 33R 1/8W 5% TZAI YUAN	
R018	061G0805330 JT	RST CHIP 33R 1/8W 5% TZAI YUAN	
C012	065G040210412K Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C013	065G040210412K Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C015	065G040210412K Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C016	065G040210412K Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C017	065G040210412K Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C018	065G040210412K Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C020	065G040210412K Y	CAP CHIP 0402 100N 16V X7R +/-10%	
C011	065G060310517Z Y	CAP 0603 1UF -20%+80% 16V Y5V	
E715	715G3995T01000004C	IR BOARD PCB	
CN011	033G8032 5F HR	CONNECTOR	
E715	715G3995T01000004S	IR BOARD PCB	2nd source